YOUNG STOCK

Welcome to the second issue of this season's young stock newsletter. As '24 has rolled into '25, and the summer weather continues, this issue looks to how you can keep growing your calves well. We have touched on drenching, trace elements, and a topical disease. As always, feel free to come speak to the team for any queries on services and products for your young stock!

Continuing Drenches

Top tips for drenching through summer:

- Only give Turbo Initial once pre-weaning. The coccidia will be taken care of for 70 days, covering the main post weaning risk period when meal intake decreases on pasture.
- We recommend following up with double combination drenches, such as Turbo Advance.
- Continue oral drenching every 4 weeks for as long as you can manage while the calves are on pasture to protect them from round worms like Cooperia, Ostertagia, and Lung worm. A final drench after 10 days on crop is recommended.
- Oral drenches are superior to injectables which are, in turn, superior to pour-ons.
- If you're unsure about your drench efficacy the we recommend a 10 day drench check. This involves taking 10 poo samples 10 days after the calves have been drenched. There should be no eggs in the poo if the drenches are working properly. With such lack of monitoring in calves, there is likely more drench resistance than we realise.
- If double combination drenches aren't cutting it, use a triple drench product, such as Alliance, Matrix C (>120kg).
- Some injectables like Eclipse E have B12 and selenium added in for convenience

DRENCH WISE

Oral drenching technique Place drench gun on top of tongue, wait till animal swallows

Tips against toxicity: •Don't use abamectin under 4 months old •Don't mix drench with milk or feed •Never swap containers, if decanting

permanently – clearly label •Check; product, dose and drench gun accuracy before administering •Weigh young stock and draft into groups for accurate dosing



WINGYEUNG SZETO



Polioencephalomalacia (PEM) – Vitamin B1 Deficiency

Polioencephalomalacia (PEM) is the technical term for the disease, essentially meaning "mushy brain." A more straightforward and helpful name is Vitamin B1 deficiency – referring to the underlying cause of the condition. Calves with PEM/B1 deficiency often exhibit symptoms such as a wobbly gait and blindness, which can lead to death if not treated. With a few cases seen lately, here is a run down of what to look out for.



Symptoms

PEM typically affects only a few calves in a group. The symptoms begin mildly but gradually worsen over time. Early signs may include calves isolating themselves in the paddock and eating less. As the brain swelling progresses, the symptoms intensify, eventually leading to blindness, a wobbly gait, disorientation, downed calves, seizures, and death. A post-mortem examination can help confirm the diagnosis, either by using UV light on the brain tissue or by sending the brain to a lab for further testing.

What causes B1 deficiency?

Calves aged 2 to 7 months, particularly after weaning, are most vulnerable to PEM. This condition typically occurs when calves transition from rough feed to lush, carbohydrate-rich pasture, or are fed brassica crops. These circumstances promote a temporary overgrowth of certain bacteria in the rumen that produce thiaminase enzymes. These enzymes break down vitamin B1 in the gut before the calf can absorb it. The resulting low levels of B1 in the blood lead to brain swelling, causing the "mushy brain" effect.

Treatment

Calves that receive treatment in the early stages

of the disease can make a full



recovery within 24 hours. However, in more severe cases brain swelling leads to seizures and recumbency, greatly lowering their chances of survival. Treatment typically involves an injectable B1 supplement, often combined with a steroid injection. Whole herd treatment can also be administered through an oral drench of B1 powder.

Prevention

- Gradually introduce calves to high-quality pasture.
- Offer roughage like silage or hay when calves are grazing lush pasture or crops.
- Limit the amount of brassica crops fed to calves.
- Administer a thiamine/B1-containing drench during the at-risk period.

Maximizing Growth and Health of Calves and Yearlings: The Role of Mineral Deficiencies

Mineral deficiencies can limit the growth and health of youngstock. Copper and Selenium are the most important trace elements for calves and yearlings in New Zealand. There are many supplementation combinations available, so talk to your vet for what options will work best for you!

Copper (Cu)

Copper is required for growth enzymes and bone development. Low copper levels can contribute to fractured leg syndrome, especially in heifers. Copper levels also significantly drop over winter in both pasture and crops.

Supplementation Options:

- Meal: Calves eating meal will usually have a copper supply, but this effect is short-lived and declines once the meal is stopped.
- Capsules/Bolus: Last approximately 3-6 months and are a great option. A sample protocol:
 - 10g at weaning (100kg)
 - 20g pre-winter (200kg) -April/May
 - 20g pre-mating (250 300kg) -Sept/Oct (or a copper injection 3+ weeks premating)
 - 30g 2nd autumn (lasting until calving)
- Injectable: Coppermax is a medium-term option for calves
 4 months. It lasts 4 months, but must be administered >1 month before mating. Be cautious of toxicity when injecting.





Notes:



If your youngstock are on a 'dosatron' or another supplemented water supply, they may already have adequate trace element status. Be cautious when adding extra minerals. Always consult with your vet before supplementation.



Selenium is important for muscle growth, immunity, and fertility.

Supplementation Options:

- Drench: Many oral drenches contain selenium. Administering drench every 4 weeks is typically adequate until Autumn. Injectable:
- Short-acting: Selovin 5 lasts approximately 1 month.
- Long-acting: Selovin LA lasts up to 12 months in adults, but in youngstock, the effect may be shorter as they outgrow their initial dose rate.



Need a Customized Youngstock Plan?

Talk to us today for tailored advice and support!



Combination Products: "All-in-1" Options

- Cosecure Bolus: Lasts 6 months and contains Cu/Se/B12.
- Dosage:
- 1 bolus for cattle 100-250kg.
- 2 boluses for cattle >250kg.
- Administration Schedule:
- First bolus: Dec/Jan around weaning.
- Second boluses: July.
- Third boluses: Jan (lasts almost until calving).
- Alltrace Bolus: Lasts up to 8 months and contains Cu/Se/B12/Zn/I/Mn/S + some vitamins.
- Dosage: 2 boluses (must rub together to release contents).
- Administration Schedule:
- First boluses: Pre-winter (Apr) or pre-mating (Sept).
- Repeat 8 months later.
- Multimin/Marksmin Injections: Contain Cu/Se/Zn/Mn. Short-acting and commonly used as a "boost" during times of high demand or stress, such as:
- New-born calves, weaning, premating, and pre-calving.
- If used as the only source of copper supplementation it will need to be given every 2 -3 months and we would recommend some blood testing to see whether any additional copper is required.



