

Media release

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How to meet the high demand for magnesium and calcium at calving

At the onset of milk production dairy and beef cows have increased requirements for magnesium and calcium.

Often animals don't receive the higher recommended amounts of both minerals required during this time due to a lack of supply in pasture. Magnesium can't be stored in the animal, so it has to be supplied every day, and if sub-optimal levels of calcium from the pasture are ingested by the cow she has to rely on mobilisation of reserves from the bone.

What can be done about this? Ballance Technical Consultant Jeff Morton says that direct supplementation of magnesium and calcium is the most cost-effective strategy, although this may not be possible, especially after calving on a more extensive beef operation.

'The two most common methods for supplying magnesium to cows on dairy farms with rotary milking sheds are dusting pastures and dispensing magnesium through the water system. Drenching is a common method in herringbones, and the addition of Causmag to hay or silage when feeding these supplements before calving is used on all farms.

'All of these methods rely on a high enough ingestion rate (15-20 g Mg/cow/day), supplementing from four weeks before to 12 to 16 weeks (or even longer) after calving and using the appropriate product. Talk to your local merchant or vet to find the best product for your situation,' says Jeff.

On dairy farms (post-calving only) lime flour can be dusted onto pasture at 100 g/cow/day to reduce the incidence of hypocalcaemia (milk fever).

What are the fertiliser options for magnesium?

'If you cannot supplement directly, or if even with supplementation you still have hypomagnesaemia (grass staggers) or milk fever (magnesium supplementation also reduces this), then either increasing your soil magnesium Quick test levels up to 25-30 or maintaining them there may be an option. Use Calmag at 100 – 200 kg/ha to increase Quick test levels, and serpentine super at 10-30 kg Mg/ha/yr to maintain soil magnesium levels.'

Jeff adds that for the fertiliser option to be effective, the cow must be fully fed to gain enough of the mineral it requires. 'In fact, this is the most important factor for any mineral.

'High soil potassium Quick test levels of 8 or greater can also increase the incidence of milk fever. On dairy farms, do not allow them to get this high and avoid potassium application before calving. On beef farms, try to calve the cows on paddocks with lower soil potassium levels.'

There are plenty of measures that can be put in place to help meet the demand for magnesium and calcium at calving. Talk to your local Ballance technical sales representative or vet about the issues on your farm.

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