



Fiji DAIRYNOTE 5.1 – Animal Health: Milk Fever

Good Practice Guide for Fiji Dairy Farmers

Milk fever

What is milk fever?

- Milk fever is a metabolic disorder caused by insufficient calcium in the blood of cows around calving time. Cows with milk fever become weak, fall down and are unable to stand or walk. Magnesium plays an important role in milk fever prevention.

Prevention through 'supplementation'

- Milk fever can be prevented by increasing the amount of magnesium in animals' diets by adding it to either their water or feed – this is called 'supplementation'. Magnesium helps because it supports the production of hormones that are important for the absorption of calcium in animals.

How do I supplement my animals' feed?

- Add magnesium to your animals' water and to their pastures 2-3 weeks before calving.
- Use magnesium sulphate or magnesium chloride for water (i.e. in a trough) and dust pastures with magnesium oxide.
- The amount of magnesium you should add depends on the breed of your animals and the product you are using (dosages are outlined on the next page).
- It is also a good idea to give your animals extra magnesium after calving. Long-term, this will help achieve 0.4% of dry matter intake per cow per day.

Treatment of milk fever

- Treatment of milk fever usually involves introducing a special solution containing calcium directly into the affected cow's blood, using the jugular vein in the neck. This is usually done by a veterinarian or a person who has been specially trained by a veterinarian to administer the treatment.
- Treatment can be very effective and result in rapid recovery, as long as it is done soon after the cow is affected.

Things to consider

- Where there is no accurate way of recording dosages of magnesium being added to a trough, there is a risk of water becoming toxic (and animals won't drink it). In this case, dusting pastures with magnesium oxide is the preferred option.
- Magnesium requirements are affected by the levels of potash and calcium in an animal's diet. Farms with very high potash levels in pasture will require more magnesium.
- Dietary calcium levels should be kept low before calving (i.e. less than 0.5% of dry matter intake per cow per day).
- Applying potassium fertiliser or lime within three months of calving can also affect animals' magnesium levels at calving.



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Dietary magnesium concentrations and quantity of supplementary magnesium required (grams of Mg per cow per day)

	Mg requirement (% of diet)	Supplementary Mg		
		Jersey (g/cow/day)	J x F (g/cow/day)	Friesian (g/cow/day)
Dry	0.35%	12	16	20
Lactating	0.28%	15	17	20

Quantities of magnesium sources to supply the required amounts of pure magnesium (down the throat)

Magnesium source (% Mg)	Example product	12g	14g	16g	18g	20g
Mg Oxide (55%)	CausMag	22	25	29	33	36
Mg Oxide (55%); applied to pasture ¹	Causmag	44-66	50-75	60-90	70-100	80-120
Mg Sulphate (10%)	Epsom Salts	122	142	162	182	202
Mg Chloride (12%)	Mag chloride	100	117	134	151	167

¹ The rates for magnesium oxide need to be doubled or tripled when applying to pasture.