

# CALCIMATE®

## Introducing your new best MATE.



## Calcium Supplementation for Peak Performance

### Use Calcimate® to help:

- Prevent milk fever or hypocalcaemia in lactating cows
- Maximise milk production potential post-calving
- Boost low calcium supplements such as PKE and maize silage for optimum assimilation
- Improve reproduction
- Strengthen their immune systems
- Counter the stress from cold weather and extreme activity (i.e. mating, calving)
- Younger stock reach their growth potential

### Quality Counts!

Calcimate is manufactured from high quality limestone. This coupled with the industry's most stringent manufacturing and testing processes, ensures that you get a fine, high calcium supplement that you can trust, every time.

- ✓ Quarry Testing
- ✓ QSO Modelling
- ✓ In Process Testing
- ✓ Processing
- ✓ Final Product Testing
- ✓ Dispatch
- ✓ Reporting

### How Do I Use Calcimate®?

- Mixed in feed
- Pasture dusted (can be dusted with magnesium)
- The recommended mixing ratio is 4 parts water to 1 part CALCIMATE. This ratio can be adjusted, however flow can be compromised at lower rates
- If mixing CALCIMATE with Magnesium Oxide (MgO) for drenching, leave the MgO in a bucket of water overnight prior to mixing with CALCIMATE
- Due to the heavy nature of lime flour, always clear drench lines after use

### FAQ's:

#### *Isn't all lime flour the same?*

No it isn't. Variations in particle size, available calcium, consistency and palatability can affect quality. Graymont Calcimate has a minimum purity of 90% Calcium Carbonate (or 36% of elemental calcium) and often exceeds 95% purity in our daily tests.

#### *Why is addressing a calcium deficit important?*

Production and animal health can be compromised. Too little calcium in your cow's diet can result in milk fever and more commonly, sub-clinical hypocalcaemia. This can become a silent production thief by limiting both milk production and reproductive performance.

#### *Does it matter when I feed out lime flour?*

Yes it does! Especially at critical times such as immediately post calving, peak lactation, mating, during any stress associated with feed changes or bad weather, and always when feeding low calcium feeds such as maize and grain based feeds. Supplement right up until dry off is complete. **Warning: Do not feed Calcimate in the four weeks prior to calving without veterinary or nutritionist advice.**

#### *What is the best way to feed Calcimate?*

Any method is fine as long as your animal uptake is optimal. Calcimate can be dusted, mixed with existing feed or drenched.

**ALL LIME IS NOT CREATED EQUAL**

For more information on CALCIMATE, visit [calcimate.com.au](http://calcimate.com.au)



**GRAYMONT**

# ARE YOUR COWS GETTING WHAT THEY NEED?

Follow our 4 steps for your own Calcimate estimate



## 01 Establish the minimum daily calcium demand

Make your selection in the tables below based on the heaviest cow with the highest milk production. Using the average cow as a standard could leave around 50% of your cows calcium deficient.

**Example:** A 400kg milking Jersey producing 30L/day = minimum of **55g Calcium Demand** daily.

Colostrum Cows Calcium requirements (g/cow/day)					
Bodyweight	Milk (Litres/cow/day)				
	15	20	25	30	35
400kg	43	54	64	74	84
450kg	45	55	65	76	86
500kg	47	57	67	77	87
550kg	48	58	69	79	89
600kg	50	60	70	80	90

Milking Cows–Jersey Cows/Jersey cross Calcium Requirements (g/cow/day)					
Bodyweight	Milk (Litres/cow/day)				
	15	20	25	30	35
400kg	34	41	48	55	62
450kg	36	43	50	57	64
500kg	37	44	51	58	65
550kg	39	46	53	60	67
600kg	40	47	54	61	68

Milking Cows–Holstein, Friesian or H/F Crosses Calcium Requirements (g/cow/day)					
Bodyweight	Milk (Litres/cow/day)				
	20	25	30	35	40
500kg	41	47	53	59	66
550kg	42	49	55	61	67
600kg	44	50	56	63	69
650kg	46	52	58	64	70
700kg	47	53	59	66	72

Note: Requirements are calculated from the 'Nutrient Requirements of Dairy Cattle', NRC (2001) for maintenance plus milk production, calcium demand for colostrum cows is significantly higher than for milking cows.

Demand will also vary slightly between breeds.

## 02 Estimate daily calcium absorbed

Note how much Dry Matter (DM) your cow consumes for each type of feed, and multiply each kg of feed by the calcium content in the feed type.

Add the calcium from the different feeds together to get a total, then multiply by 0.38\* to factor in absorption.

**Example:**

10kg Winter Pasture at 5.5g/kg of DM = 55g

6kg Maize Silage at 1.25 g/kg of DM = 7.5g

2kg Grass Silage at 6.5g/kg of DM = 13g

55g + 7.5g + 13g = 75.5g total calcium eaten

75.5g \* 0.38 = **28.7g Calcium Absorbed** daily

Feed	Calcium Content (g/kg DM)
Spring Pasture	3-8
Summer Pasture	5-12
Autumn Pasture	3-8
Winter Pasture	3-8
Maize Silage	1.0-1.5
Rolled Barley	0.6
Grass Silage	3-10

\*Absorption rate used assumes 38% based on a forage based diet. Where available, calcium values from feed tests are preferable, otherwise average calcium values can be found using the table to the right.

## 03 Work out their daily calcium deficit

Subtract the daily **Calcium Absorbed (Step 2)** from the daily **Calcium Demand (Step 1)** to get your cow's daily **Calcium Deficit**.

**Example:**

55g Calcium Demand – 28.7g Calcium Absorbed  
= **26.3g Calcium Deficit**

## 04 Determine amount of **CALCIMATE** required

Multiply the Calcium Deficit by a factor of 4\* to get the amount of **CALCIMATE** required to offset the deficit.

\* This calculation assumes use of Calcimate which contains a guaranteed minimum of 36% elemental calcium and factors in an absorption efficiency of 70%.

**Example:**

26.3g Calcium Deficit x 4  
= **a minimum of 105g CALCIMATE/cow/day**

OR for a 400 cow herd @ 105g per cow  
= **42kg of CALCIMATE/day total for herd**

Minimum requirements stated are for calcium down the throat – allowance has to be made for wastage, and outside cows can have additional calcium requirements especially in bad weather and/or if still growing. Calculations and tables are provided as guidelines only, for detailed advice, consult your veterinarian or nutritionist.