

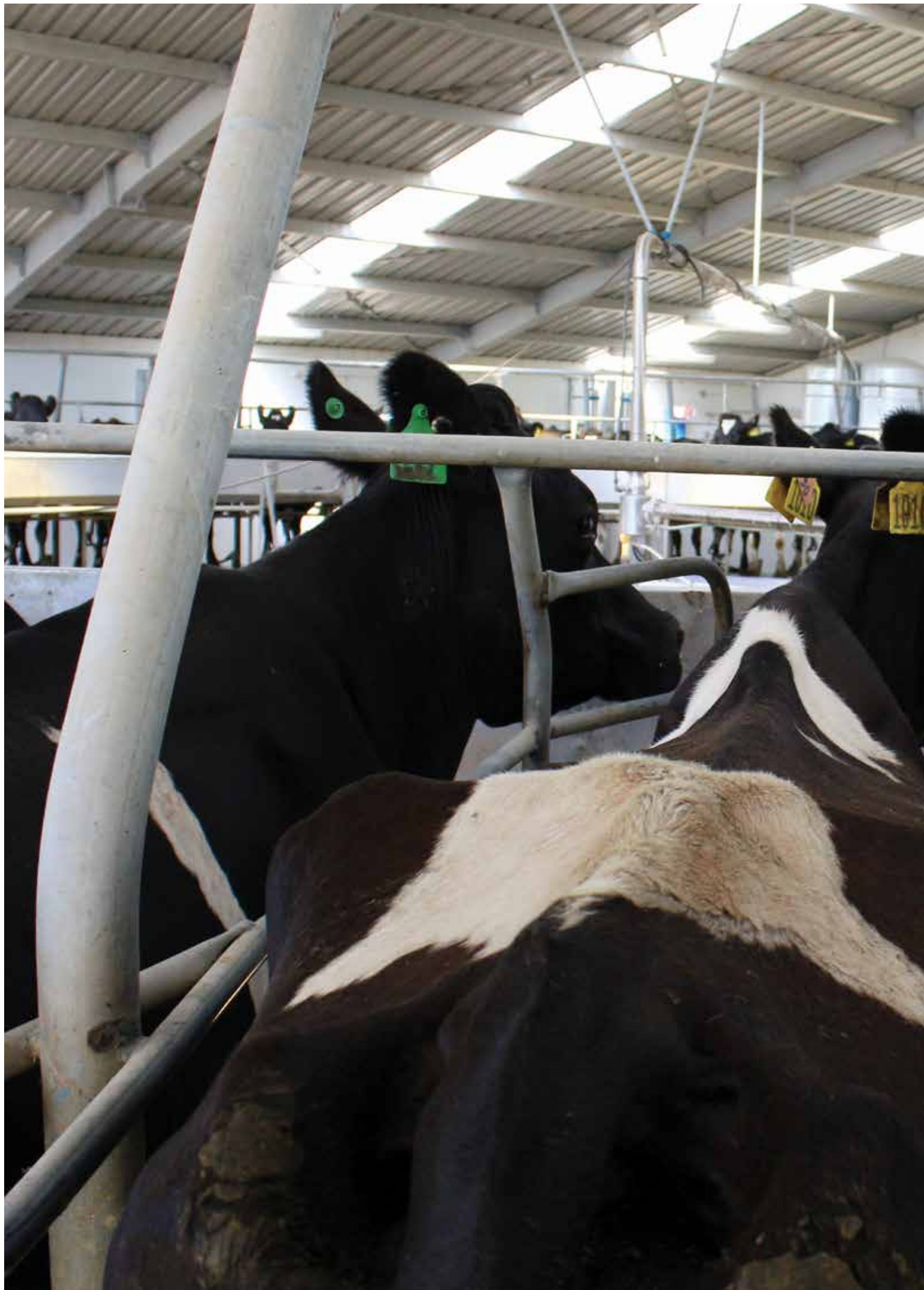
# Animal Health

Dairy



Taking good care of  
your investment









# Best practice for keeping your cows healthy

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|  |           |
|--|-----------|
| <b>Maximising dairy profitability</b>                  | <b>3</b>  |
| <b>The thief in the background</b>                     | <b>4</b>  |
| <b>Metabolics need not be a delicate balancing act</b> | <b>6</b>  |
| <b>Boosting trace elements</b>                         | <b>8</b>  |
| <b>Test to know</b>                                    | <b>9</b>  |
| <b>Seasonal activity</b>                               | <b>10</b> |
| <b>Product catalogue</b>                               | <b>13</b> |
| <b>Parasite control</b>                                | <b>14</b> |
| <b>Applicator guns</b>                                 | <b>16</b> |
| <b>Magnesium supplements</b>                           | <b>17</b> |
| <b>Mineral supplements</b>                             | <b>18</b> |
| <b>Trace elements</b>                                  | <b>19</b> |
| <b>Flavouring agent</b>                                | <b>21</b> |
| <b>Facial eczema - zinc / fungicide</b>                | <b>22</b> |
| <b>Vitamins</b>  | <b>23</b> |
| <b>Nutrition</b>                                       | <b>23</b> |
| <b>Dairy health planner</b>                            | <b>24</b> |



**"Getting the  
best return  
from every  
dollar."**



**MOXIMAX® POUR ON**  
- NIL MEAT AND MILK  
WITHHOLDING PERIOD  
WITH LONG LASTING  
PERSISTENCE.



**DAIRY COW MINERALS™**  
- CONTAINS COPPER,  
COBALT, SELENIUM,  
IODINE AND ZINC.

# Maximising dairy profitability

**It's more than how much milk is in the vat. It is about getting the best return from every dollar spent.**

Healthy stock are critical to getting the most out of the investment farmers make in growing and providing feed to their animals.

Key components of a good animal health plan will include:

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## 1. Getting the nutrition right

Growing good grass allows for well fed cows that produce more milk, get back in calf quicker, and are less susceptible to other animal health issues like; worms, facial eczema, lameness, etc. Supplementing animal diets with important minerals and trace elements when required, further unlocks your cow's ability to reach their potential.

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## 2. Having a plan to stay ahead of the preventable challenges

A well-organised animal health plan will mean that you are always one step ahead of potential problems. This can prevent your animals from being saddled with diseases and conditions including; metabolic disease, lameness, facial eczema, mineral deficiencies, that lead to reduced productivity, reproduction and unnecessary stock losses.

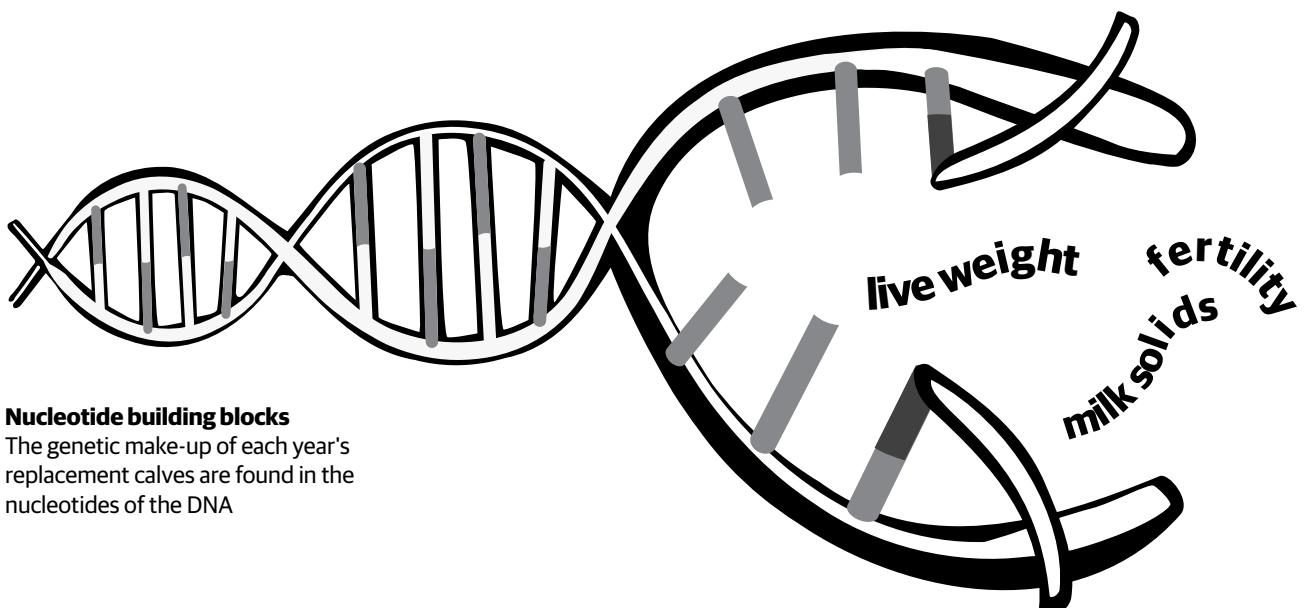
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## 3. Growing young stock well

The future prosperity of any dairy farm is contained within the genetic make-up of each year's replacement calves. To enable calves to reach their genetic potential will require careful planning from before the calf hits the ground through to entering the milking herd. Well grown calves will be more likely to get in calf and produce more milk throughout their milking life.

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Getting these three things right will help future-proof your farm. If you would like to put a plan together to maximize your production, your local Ravensdown Animal Health Area Manager can help.



### Nucleotide building blocks

The genetic make-up of each year's replacement calves are found in the nucleotides of the DNA

# The thief in the background

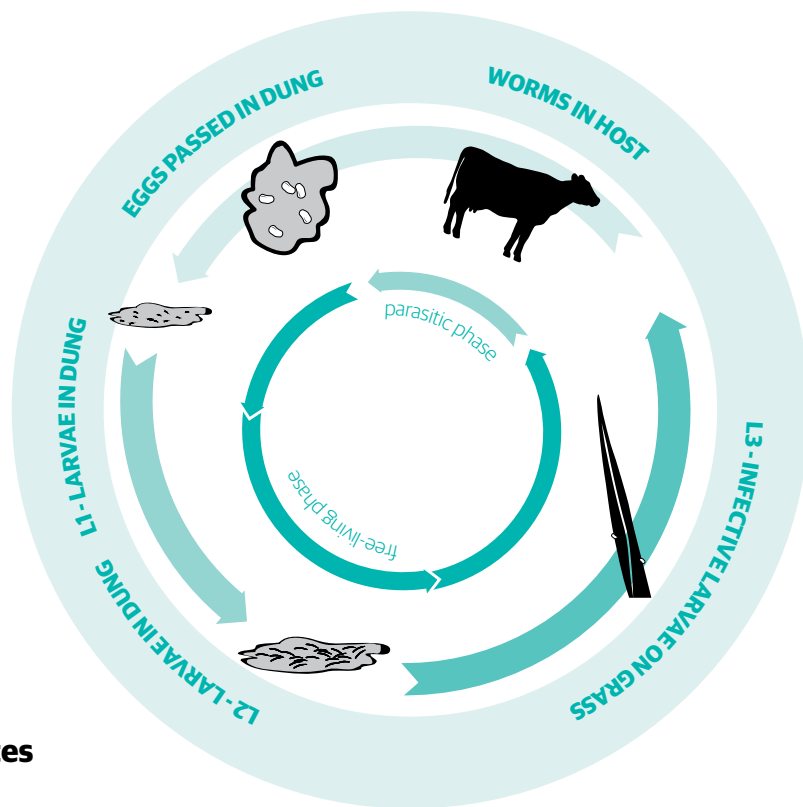
**Don't underestimate the impact of parasites on achieving your goals whether it be growing top heifers, or maximising your milk production.**

Changes in farming systems and increasing levels of drench resistance require farmers to develop multipronged plans to reduce the impact of parasites.

## Developing your parasite management programme:

- **Provide good nutrition** – ensure animals are well fed. Well-conditioned animals require less drenching, saving costs and reducing selection for drench resistance.
- **Reduce worm challenge** – cross-graze young and old stock, avoid grazing young stock where pasture worm challenge is high, graze young stock on new grass/crop paddocks.
- **Use effective drenches** – some drench actives are more effective than others for certain worm types. Oral drenches may be a better option for young stock for delaying resistance, but may require more treatments.
- **Use drenches correctly** – using the correct dose rates, regularly calibrating the drench gun, dosing to the heaviest animal and good application technique are all important for ensuring high levels of treatment efficacy.
- **Slow the development of drench resistance** – drenching adult cattle only when necessary, aiming for a minimum 28-day drench interval in calves, using combination drenches in young stock.
- **Monitor drench performance** – although faecal egg counts have limited application in cattle, they can still provide valuable information on worm burdens in young stock and drench efficacy.

**For further information on parasite control: [wormwise.co.nz/](http://wormwise.co.nz/)**



### LIFE CYCLE OF NEMATODES

General life cycle of common gastrointestinal nematodes of cattle

## Worms preventing you achieving liveweight targets?

Worm infections in calves reduce their feed intake resulting in reduced growth rates. Calves that fail to meet key liveweight targets during the first 2 years will be less likely to get in calf and go on to produce less milk during lactation.

Regular treatment with effective anthelmintics is critical to ensuring calves are not limited by parasites and achieve their liveweight targets.

### Benefits:

- **Reproduction** - Achieving the 15 month LW target will help minimise the incidence of non-cycling heifers at mating.
- **Production** - \*At a \$4 pay-out, each additional kg of LW at 22 months (between 80-90% of mature LW) will return around \$1 in the first lactation.

\*Source: dairynz.co.nz



**“Don't  
underestimate  
the impact of  
parasites.”**



**ABAMECTIN™ POUR ON  
- LOW DOSE INTERNAL  
AND EXTERNAL PARASITE  
CONTROL**



**TRIO™ LOW DOSE- USE TRIPLE  
COMBINATIONS TO SLOW  
RESISTANCE**

# Metabolics need not be a delicate balancing act

**Transitioning cows through pre-calving and into lactation requires careful planning, but it doesn't have to be complicated.**

To avoid the costly consequences of metabolic disease including; reduced milk production, delayed mating and stock deaths, you must be able to identify and understand if you have a problem. Key signs are if you have more than 3% of your cows going down, or use more than 10 bags of metabolic treatments for every 100 cows. Don't forget that for every case of clinical disease you treat, there will be other cows suffering from sub-clinical disease in the herd. In all cases, correctly balancing the cow's mineral requirements will help minimise levels of metabolic disease.

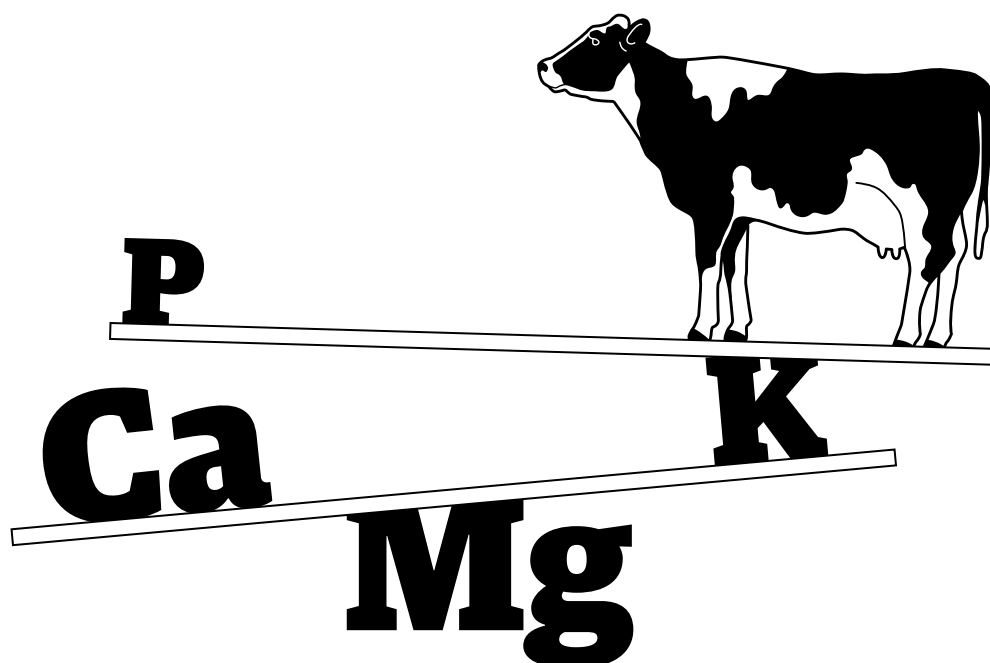
## Understand the problem

### To help with any diagnosis consider:

- When cows are going down - pre-calving, calving or post calving?
- Soil and pasture test results
- Cow diet during pre-calving - post-calving period
- Types, amounts and rates of minerals used pre and post-calving
- Blood test results for magnesium, calcium, phosphorus and energy
- Weather conditions
- Fertiliser and lime history.

### Prevention is better than cure:

- Ensure stock are being adequately fed before, during and after calving
- Manage cow and heifer body condition pre-calving
- Use a quality magnesium supplement from 4-6 weeks pre-calving through to at least the end of mating
- Minimise pre-calving calcium supplementation including liming pastures
- Identify 'at-risk' animals early and manage them accordingly
- Avoid grazing effluent blocks with late pregnancy cows.
- Use a quality lime flour for post-calving calcium supplementation





**"It's important to  
record which cows,  
when and why."**



**STARTER DRENCH™ -  
CONVENIENT, READY-TO-  
USE, POST-CALVING ENERGY  
STARTER DRENCH**



**MAGNESIUM OXIDE FINE  
- HIGH QUALITY 200-  
MESH DUSTING-GRADE  
MAGNESIUM OXIDE**

# Boosting trace elements

**There are eighteen trace elements (also known as micro elements) needed by animals in tiny amounts that are essential for life. In New Zealand pasture-based systems, we need to watch out for deficiencies in cobalt, copper, iodine, and selenium.**

## **How do we know when there is a problem?**

Research specific to New Zealand has been carried out over many years so we know the signs of deficiency, the dietary requirements, the reference ranges and effective treatments for these trace elements.

**How do we diagnose a deficiency?** Animal testing is the most conclusive way to diagnose a deficiency. However, animal symptoms, farm history, soil type and farm location can also identify the probability that a mineral deficiency will be present. Additional testing of herbage and supplementary feeds can help provide valuable information in diagnosing a trace element deficiency.

**Timing** is important as trace element uptake by pasture will vary at different times of the year. Generally actively-growing grass in the spring gives the best indication of what is available to the animal.

| ELEMENT              | ANIMAL HEALTH  | SUPPLEMENTATION   |
|----------------------|--|---|
| <b>Cobalt (Co)</b>   | Critically important for vitamin B <sub>12</sub> production. Loss of appetite and poor growth. | Cobalt sulphate in spring fertiliser application, Stock Cobalt, Dairy Cow Minerals by drench, water, feed and Lift B <sub>12</sub> injection.                   |
| <b>Copper (Cu)</b>   | Ill-thrift, sway back, bone problems and poor reproduction.                                    | Copper sulphate in autumn fertiliser application, Stock Copper, Dairy Cow Minerals by drench, water, feed and foliar (plant leaf) application.                  |
| <b>Iodine (I)</b>    | Goitre (enlarged thyroid gland), still births, small weak offspring.                           | Stock iodine, Dairy Cow Minerals by drench, water, feed and foliar application. Injectable iodine is also used.   |
| <b>Selenium (Se)</b> | Ill-thrift, white muscle disease, reduced production and fertility.                            | Selprill Double in fertiliser (lasts for 12 months), Stock Selenium, Dairy Cow Minerals by drench, water and feed and Lift B <sub>12</sub> Selenised injection. |



**SELPRILL DOUBLE - SLOW RELEASE 2% SELENIUM PRILL FOR USE AS FERTILISER ADDITIVE TO PREVENT SELENIUM DEFICIENCY IN GRAZING LIVESTOCK**

**B12 - INJECTABLE VITAMIN B12 SELENISED FOR TREATMENT AND PROVENTION OF COBALT DEFICIENCY**





# Test to know

**Having good information is critical when determining where to invest on-farm. Sound, scientific interpretation of collected data can lead to increased productivity for your farm.**

## **Faecal Testing**

**Faecal Egg Count (FEC)** - determine animal worm burdens, the need to drench or check how well a drench has worked. Composite (Mob) or Individual (FEC) options available.

**Larval Culture** - identify which roundworm species are causing problems in stock.

**Liver Fluke** - fluke egg count to confirm and/or monitor liver fluke infections in stock.

**Lungworm** - larval extraction to monitor stock for lungworm.

## **Drench Resistance Testing**

### **Faecal Egg Count Reduction Testing or**

**FECRT** - a comprehensive test farmers can use to assess the effectiveness of drenches on their farm. It is recommended a FECRT is undertaken every 2-3 years, or when there is suspicion a drench treatment has been

ineffective, or when there is a positive drench check. Testing is available for one specific drench or a range of drench products. FECRT includes all FEC, larval cultures, equipment and reporting.

## **Facial Eczema Testing**

**Pasture Spore Counting** - determine the FE risk by measuring the number of spores on pastures.

**Faecal Spore Counting** - determine the FE risk by measuring the number of spores passing through animals. Faecal spore counting reduces the variability seen with pasture spore counting.

## **Herbage and feed Testing**

**Herbage Testing** - determine if the pasture can provide animals with the required amounts of dietary minerals, including important trace elements.

**Feed Quality Testing** - use the nutritional value of pasture and supplementary feeds to assist in determining nutritional requirements and feed budgeting.

**FOR MORE INFORMATION TALK TO US ABOUT RAVENSDOWN TESTING SERVICES.**

**CALL OUR CUSTOMER CENTRE ON 0800 100 123**

  
**ravensdown**



# Seasonal activity on a dairy farm



## Spring

### DAIRY

**Pre-calving:** Moximax Pour On

**Calving:** Lime Flour; Magnesium Oxide and Magnesium Chloride/Sulphate; Starter Drench; Lift B<sub>12</sub>; Sweetwater; Dairy Cow Minerals; DCM Gold; DCM Zero; Custom Mineral Blends

**Calf rearing:** Calf Milk Replacer; Sweetwater; Dairy Cow Minerals; DCM Gold; DCM Zero; Custom Mineral Blends

### Herbage testing

**Mating:** Stock Iodine; Stock Selenium; Lift B<sub>12</sub>

**Post-calving:** Abamectin Pour On; Moximax Pour On

**Replacement stock:** Abamectin Pour On; Abamectin Injection; Moximax Pour On; Trio Low Dose; Duo Low Dose; Combo Low Dose; Animec Super Injection





## Summer

### DAIRY

**Pregnancy testing**

**Facial eczema, pasture and faecal spore testing**

**Facial eczema prevention:** Zinc Sulphate Mono/Hepta; Zinc Oxide Plus; Sporeguard/Sporewet

**Drench replacements:** Abamectin Pour On; Abamectin Injection; Moximax Pour On; Trio Low Dose; Duo Low Dose; Combo Low Dose

**Nuisance fly:** Deltamethrin Pour On



## Autumn

### DAIRY

**Herbage/liver testing**

**Facial eczema, pasture and faecal spore testing**

**Facial eczema prevention:** Zinc Sulphate Mono/Hepta; Zinc Oxide Plus; Sporeguard/Sporewet

**Drying off cows:** Abamectin Pour On; Abamectin Injection; Moximax Pour On; Trio Low Dose; Duo Low Dose; Combo Low Dose; Stock Copper; Lift B<sub>12</sub>

**Liver fluke:** Animec Super Injection

**Drench replacements:** Abamectin Pour On; Abamectin Injection; Moximax Pour On; Trio Low Dose; Duo Low Dose; Combo Low Dose

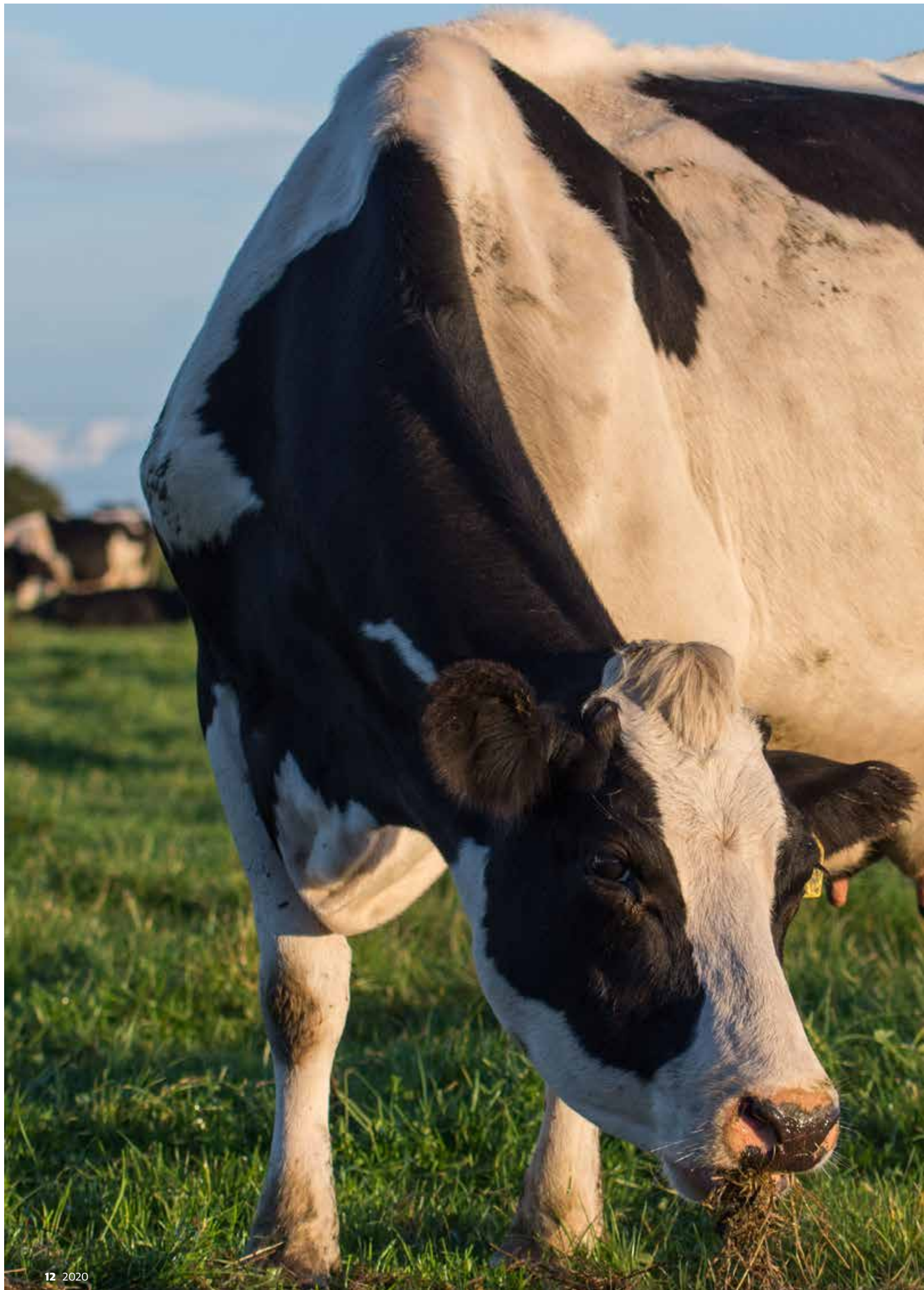


## Winter

### DAIRY

**Winter grazing:** Abamectin Pour On; Abamectin Injection; Moximax Pour On; Trio Low Dose; Duo Low Dose; Combo Low Dose; Dairy Cow Minerals; DCM Gold; DCM Zero; Custom Mineral Blends; Stock Minerals; Lift B<sub>12</sub>







# Product catalogue

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## Parasite control

- Pour-on
- Injectable
- Oral

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## Applicator guns

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## Supplements

- Magnesium and other minerals
- Trace elements
- Flavouring agent

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## Facial Eczema

- Zinc
- Fungicides

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## Vitamins

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## Nutrition



## Moximax® Pour On

### Long-lasting parasite control

- Endectocide (ML) pour-on containing moxidectin
- Effective against all moxidectin-susceptible round worms (including inhibited *Ostertagia* larvae) and lice in cattle
- Effective against all moxidectin-susceptible round worms, including lung worm in deer
- In cattle prevents reinfection of *Dictyocaulus viviparus*, *Oesophagostomum radiatum*, and *Bunostomum phlebotomum* for 42 days, *Ostertagia Ostertagi* for 35 days, and *Haemonchus* spp and *Trichostrongylus axei* for 28 days
- Rain-fast formula can be applied when hide is wet, or if rain occurs shortly after application



**ACTIVE INGREDIENT:** 5g/L moxidectin

**DOSE RATE:** 1ml/10kg live-weight

**WITHHOLDING PERIODS:**

**Meat:** nil; **Milk:** nil

**PACK SIZES:** 5L backpack & 15L drum

Registered pursuant to the ACVM Act 1997, No A11326



## Abamectin™ Pour On

### Low dose internal and external parasite control

- Endectocide (ML) pour on anthelmintic containing abamectin
- Low dose formulation at 1ml/20kg live-weight
- Effective against all abamectin-susceptible roundworms (including inhibited *Ostertagia* larvae) and lungworm
- Highly effective against external parasites (biting and sucking lice)



**ACTIVE INGREDIENT:** 10g/L abamectin

**DOSE RATE:** 1ml/20kg live-weight

**WITHHOLDING PERIODS:**

**Meat:** 35 days; **Milk:** nil

**PACK SIZES:** 5L backpack & 20L drum

Registered pursuant to the ACVM Act 1997, No A9445.



## Abamectin™ Injection

### Suitable for cattle over 100kg live-weight

- Injectable endectocide (ML) anthelmintic with the potent active ingredient abamectin
- Effective against all abamectin-susceptible roundworms (including inhibited *Ostertagia* larvae) and lungworm
- Effective against sucking lice on cattle
- In cattle: up to 21 days persistent activity against *Dictyocaulus viviparus*; 14 days persistent activity against *Ostertagia* spp, *Cooperia* spp (ML susceptible) and *Trichostrongylus axei*; and 7 days persistent activity against *Oesophagostomum radiatum*



**ACTIVE INGREDIENT:** 10g/L abamectin

**DOSE RATE:** 1ml/50kg live-weight

**WITHHOLDING PERIODS:**

**Cattle:** Meat (49 days); Milk (49 days)

**PACK SIZE:** 500ml injection pack

Registered pursuant to the ACVM Act 1997, No A9446.



## Animec Super Injection

### Controls liver fluke, roundworms and lice

- Injectable combination anthelmintic containing ivermectin and clorsulon
- Effective against all ivermectin-susceptible roundworms and lungworm, as well as sucking lice and mites
- Clorsulon is specifically effective against adult liver fluke
- Up to 21 days persistent activity against *Dictyocaulus viviparus* and *Oesophagostomum radiatum*; 14 days against *Ostertagia* spp (including inhibited immatures); and 7 days against ML-susceptible *Cooperia* spp



**ACTIVE INGREDIENTS:** 10g/L ivermectin (endectocide); 100g/L clorsulon (specific flukicide)

**DOSE RATE:** 1ml/50kg live-weight

**WITHHOLDING PERIODS:**

**Meat:** 28 days; **Milk:** 14 days

**PACK SIZE:** 500ml injection pack

Registered pursuant to the ACVM Act 1997, No A9938.







## Trio® Low Dose

### Registered triple combination drench

- Mineralised triple combination oral drench white/ML/clear
- Effective against roundworm and lungworm
- Ideal for treatment of *Cooperia* in young cattle
- Slows development of drench resistance



**ACTIVE INGREDIENTS:** 2g/L abamectin; 45.3g/L oxfendazole; 80g/L levamisole hydrochloride; 5g/L cobalt; 1g/L selenium  
**DOSE RATE:** 1ml/10kg live-weight  
**WITHHOLDING PERIODS:**  
**Meat:** 14 days; **Milk:** 35 days  
**PACK SIZES:** 5L backpack & 20L drum

Registered pursuant to the ACVM Act 1997, No A11505.



## Duo® Low Dose

### Registered combination drench

- Mineralised double combination (ML/clear) oral drench
- Effective against roundworm and lungworm
- Ideal for treatment of *Cooperia* in young cattle
- Slows development of drench resistance



**ACTIVE INGREDIENTS:** 2g/L abamectin; 80g/L levamisole hydrochloride; 5g/L cobalt; 1g/L selenium  
**DOSE RATE:** 1ml/10kg live-weight  
**WITHHOLDING PERIODS:**  
**Meat:** 14 days; **Milk:** 35 days  
**PACK SIZES:** 5L backpack & 20L drum

Registered pursuant to the ACVM Act 1997, No A11503.



## Combo™ Low Dose

### Registered combination drench

- Mineralised double combination (white and clear) oral drench
- Effective against all roundworms (including inhibited *Ostertagia* larvae and strains that are resistant to either the *Benzimidazole* family or *Levamisole*), lungworm, tapeworm and adult liver fluke
- Ideal for the treatment of *Cooperia* in young cattle



**ACTIVE INGREDIENTS:** 45.3g/L oxfendazole; 80g/L levamisole; 0.9g/L selenium; 0.2g/L cobalt; 2g/L copper; 0.9g/L iodine; 0.6g/L zinc  
**DOSE RATE:** 1ml/10kg live-weight  
**WITHHOLDING PERIODS:**  
**Meat:** 10 days; **Milk:** 35 days (cattle)  
**PACK SIZES:** 5L backpack & 20L drum

Registered pursuant to the ACVM Act 1997, No A10784.



## Flumethrin Pour On

### Pour-on tick treatment

- Treats and controls all stages of tick lifecycle
- To aid in the control of tick-borne *Theileria* infection in cattle



**ACTIVE INGREDIENTS:** 10g/L flumethrin  
**DOSE RATE:** 20mL up to 200kg live-weight; 30mL for 200-300kg live-weight; 40mL for 300-400kg live-weight; 50mL for over 400kg live-weight  
**WITHHOLDING PERIODS:**  
**Meat:** nil; **Milk:** nil  
**PACK SIZES:** 5L backpack

Registered pursuant to the ACVM Act 1997, No. A11502



## Deltamethrin Pour On

### Pour-on fly and lice treatment

- Yellow, water-based synthetic pyrethroid insecticide
- Controls biting and sucking lice on cattle of any age
- Controls nuisance fly for a period of up to four weeks
- Maximum lice kills achieved up to six weeks after application but rapid relief of symptoms



**ACTIVE INGREDIENTS:** 15/L Deltamethrin  
**DOSE RATE:** 1mL/20kg live-weight  
**WITHHOLDING PERIODS:**  
**Meat:** 28 days; **Milk:** nil  
**PACK SIZES:** 5L

Registered pursuant to the ACVM Act 1997, No. A11646.



# Applicator guns



**Designed to work with Ravensdown products.**  
**Spare needles and backpacks are available on request by calling 0800 100 123.**

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## 8ml low-dose gun

- Comes with oral drenching (90mm) nozzle



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## 60ml multi-use gun

- Comes with oral drenching (150mm) and pour-on nozzles



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## 15ml multi-use gun

- Comes with five nozzles: oral drenching (90mm and 100mm), pour-on, spray on and T-bar



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## Injection gun

- Comes with two needles
- 2ml, 5ml and 10ml options



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## 30ml multi-use gun

- Comes with four nozzles: oral drenching (100mm), pour-on, spray-on and T-bar



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## Drench hook

- To connect to a standard drench gun for easy oral drenching of larger cattle





# Magnesium supplements



## Magnesium Oxide Fine

### 90% MgO

- High-quality 200-mesh dusting-grade magnesium oxide (MgO)
- Suitable for pasture dusting, pasture spraying or addition to supplementary feed
- Can also be used for oral drenching



**ACTIVE INGREDIENT:** 54% elemental magnesium (90% magnesium oxide)  
**DOSE RATE:** 30-70g per cow per day  
Actual rate depends on magnesium requirements and method of administration  
**PACK SIZE:** 25kg lined paper bag



## Magnesium Oxide Drenching

### Stable in suspension for easy drenching

- High-quality 325-mesh drenching-grade magnesium oxide (MgO) for daily oral drenching of dairy cows in the cow shed
- Uniform particle size means that it readily stays in suspension
- Can be used for pasture dusting or spraying, or addition to supplementary feed at higher rates



**ACTIVE INGREDIENT:** 54% elemental magnesium (90% magnesium oxide)  
**DOSE RATE:** 20-30g per cow per day depending on magnesium status  
**PACK SIZE:** 20kg lined polypropylene bag



## Magnesium Chloride Natural

### Water soluble magnesium supplement

- High-quality natural (unbleached) magnesium chloride ( $MgCl_2 \cdot 6H_2O$ ) that is highly soluble in water
- Suitable for addition to the drinking water or supplementary feed, or for daily oral drenching
- May contain a very small amount of harmless insoluble organic residue



**ACTIVE INGREDIENT:** 12% elemental magnesium  
**DOSE RATE:** 60-100g per cow per day  
Actual rate depends on magnesium requirements and method of administration  
**PACK SIZE:** 25kg lined polypropylene bag



## Magnesium Sulphate

### Water soluble magnesium supplement

- High-quality magnesium sulphate (Epsom Salts or  $MgSO_4 \cdot 7H_2O$ )
- Suitable for addition to the drinking water or supplementary feed, or for daily oral drenching



**ACTIVE INGREDIENT:** 10% elemental magnesium  
**DOSE RATE:** Cattle: 60-120g per cow per day; Actual rate depends on magnesium requirements and method of administration  
**PACK SIZE:** 25kg lined polypropylene bag



# Mineral supplements



## Lime Flour

### Calcium supplement

- Ultra-fine high-quality calcium supplement ( $\text{CaCO}_3$ )
- Use for dairy cows after calving to aid in the prevention of milk fever
- Can be used by pasture dusting, daily oral drenching or addition to supplementary feed
- Suitable as a calcium supplement for adding to low calcium-feeds such as maize silage
- To avoid the risk of inducing milk fever, do not administer during the last 1-2 months of pregnancy unless on veterinary advice



#### ACTIVE INGREDIENT:

39% elemental calcium

**DOSE RATE:** 50-300g per cow per day depending on calcium requirements and method of administration

Alternatively add to maize silage at a rate of

60-120g/kg wet feed or 20-40g/kg dry feed

**PACK SIZE:** 25kg lined polypropylene bag



## Salt

### Sodium supplement

- Coarse grade 22 salt ( $\text{NaCl}$ ) suitable for oral drenching, licks, addition to drinking water or addition to supplementary feed
- Aids in the prevention and treatment of salt (sodium) deficiency
- Fine salt also available from some stores



#### ACTIVE INGREDIENT:

39% elemental sodium

**DOSE RATE:** 20-30g per cow per day Actual rate depends on sodium requirements and method of administration

**PACK SIZE:** 25kg polypropylene bag (also available in 1 tonne bulk bag from selected stores)



## Maize Triple Mix™

### Maize silage balancer

- Convenient ready-mixed calcium, magnesium and sodium supplement for addition to maize silage at the time of feeding out
- Aids in the prevention of hypocalcaemia (milk fever), hypomagnesaemia (grass staggers) and sodium deficiency
- Do not administer during the last 1-2 months of pregnancy unless on veterinary or nutritional advice to avoid the risk of inducing milk fever



**ACTIVE INGREDIENTS:** 21% elemental calcium (as lime flour); 14% elemental magnesium (as magnesium oxide); 8% elemental sodium (as salt)

**DOSE RATE:** 150g per cow per day

**PACK SIZE:** 25kg lined polypropylene bag



## Dicalcium Phosphate Powder

### Feed grade source of phosphorus, in a powder form, suitable for animal use

- Can be mixed into feed in a silage/mixer wagon, orally drenched, and dusted onto pasture. If adding to the hay/silage in the paddock, add it to water (+/- molasses) to make a slurry ensuring better distribution through the feed, and help to reduce wastage.
- Aids in the prevention of phosphorous deficiency when feeding forages or supplements low in phosphorous



**ACTIVE INGREDIENTS:** 20% elemental calcium, 18% elemental phosphorous from dicalcium phosphate dihydrate

**DOSE RATE:** 30-50g/cow/day as treatment in the instance of phosphorus deficiency

**PACK SIZES:** 25kg bag



## Starter Drench™

### Free flow formulation for easier drenching

- Convenient, ready-to-use, post-calving energy starter drench to provide energy and aid in the prevention of metabolic conditions (milk fever, grass staggers and ketosis)
- Flowable formulation means that it does not settle out or require stirring, making it easy to drench
- Do not administer pre-calving unless on veterinary advice, to avoid the risk of inducing milk fever



**ACTIVE INGREDIENTS:** 200g/L monopropylene glycol (MPG); 150g/L molasses; 100g/L soya oil; 12.5g/L magnesium (as magnesium oxide); 60g/L calcium (as precipitated calcium carbonate)

**DOSE RATE:** 1L per cow as soon as practical after calving; additional doses of ½ -1L for up to four days may be given

**PACK SIZES:** 20L and 200L drums





# Trace elements



## Dairy Cow Minerals™

### Proven trace elements – giving you the essentials

- Free-flow water-soluble multi-mineral trace element mix
- Contains all five trace elements that are essential for animal health
- Easily dissolved, so is suitable for the supplementation of dairy cows via addition to the drinking water, oral daily drenching, or addition to supplementary feed
- Contains aniseed flavouring for improved palatability
- Do not administer while dosing with zinc for facial eczema prevention



**ACTIVE INGREDIENTS:** 250mg elemental copper (as copper sulphate), 5mg elemental cobalt (as cobalt sulphate), 3mg elemental selenium (as sodium selenate), 10mg elemental iodine (as calcium iodate) and 400mg elemental zinc (as zinc sulphate monohydrate) per 5g dose

**DOSE RATE:** 5g per cow per day

**PACK SIZE:** 25kg lined polypropylene bag



## DCM™ Gold

### All organic copper

- Free-flow water-soluble multi-mineral trace element mix containing copper, cobalt, selenium, iodine and zinc
- Contains aniseed flavouring for improved palatability
- Suitable where organic copper is required or where it is desirable to avoid the use of copper sulphate
- Easily dissolved, so is suitable for the supplementation of dairy cows via addition to the drinking water, oral daily drenching, or addition to supplementary feed



**ACTIVE INGREDIENTS:** 150mg elemental copper (as copper EDTA), 10mg elemental cobalt (as cobalt sulphate), 5mg elemental selenium (as sodium selenate), 10mg elemental iodine (as EDDI) and 600mg elemental zinc (as zinc sulphate monohydrate) per 5g dose

**DOSE RATE:** 5g per cow per day

**PACK SIZE:** 25kg lined polypropylene bag



## DCM™ Zero

### No copper

- Free-flow water-soluble multi-mineral trace element mix, with cobalt, selenium, iodine and zinc
- Contains aniseed flavouring for improved palatability
- Designed to be administered during the facial eczema season or where herd copper levels are already adequate (e.g. when feeding significant amounts of PKE)
- Easily dissolved, so is suitable for the supplementation of dairy cows via addition to the drinking water, oral daily drenching, or addition to supplementary feed



**ACTIVE INGREDIENTS:** 10mg elemental cobalt (as cobalt sulphate), 3mg elemental selenium (as sodium selenate), 10mg elemental iodine (as EDDI) and 400mg elemental zinc (as zinc sulphate monohydrate) per 5g dose

**DOSE RATE:** 5g per cow per day

**PACK SIZE:** 25kg lined polypropylene bag



## Custom Mineral Blend

### Tailored to suit

- A service that provides a customised mineral blend tailor-made for an individual farm
- Ingredients can include trace elements, minerals, vitamins and many other additives that may be required (subject to compatibility)
- Product is manufactured according to farmers' individual requirements (Ravensdown can assist in determining this if required) and is delivered direct to farm within 10-15 working days in 25kg lined polypropylene bags, in half or one tonne lots
- An optional extra is the inclusion of convenient 'day packs' inside each 25kg bag that provide the whole herd's requirements for one day





## Stock Selenium™

### Convenient ready to use liquid selenium supplement

- Prevention and treatment of selenium deficiency
- Use by medication of the drinking water, oral drenching (daily or strategic) or addition to supplementary feed



**ACTIVE INGREDIENT:** 0.5% (5g/L) elemental selenium (as sodium selenate) as a colourless solution

**DOSE RATE: Strategic oral drenching:** 1ml/50kg live-weight no more frequently than every 3 weeks

**Daily dosing:** 0.1ml/50kg live-weight per day; by drenching, water or feed medication

**PACK SIZES:** 20L & 200L drums



## Selprill Double®

### Up to 12 months supplementation for the whole farm with our patented prill

- A slow-release 2% selenium prill for use as a fertiliser additive to raise soil and herbage selenium levels
- Treatment and prevention of selenium deficiency in grazing animals



**ACTIVE INGREDIENT:** 2% elemental selenium

**DOSE RATE:** ½ kg per hectare per year (10g elemental selenium per hectare per year)

**PACK SIZE:** 25kg polypropylene bag

Selprill Double® is a registered trademark. NZ Patent number 534753.



## Stock Iodine™

### Convenient ready to use iodine supplement

- Prevention and treatment of iodine deficiency
- Use by addition to the drinking water, oral drenching (daily or strategic), addition to supplementary feed or foliar application (preferably with a suitable sticking agent)



**ACTIVE INGREDIENT:** 5% elemental iodine (as potassium iodide) as a colourless to light brown solution

**DOSE RATE: Strategic oral drenching:** ewes 4-5ml monthly as required.

**Daily dosing:** 0.1-0.8ml per cow per day; 1-4ml per 100 adult sheep per day; by drenching, water or feed medication

**Foliar application:** 1.25L/ha (pasture); 2.5L/ha (brassicas) up to 1-2 weeks pre-grazing

**PACK SIZES:** 20L drum



## Stock Copper™

### Convenient ready to use copper supplement

- Prevention and treatment of copper deficiency
- Use by addition to the drinking water, oral daily drenching, addition to supplementary feed or foliar application (preferably with a suitable sticking agent)
- Do not administer to animals while dosing with zinc for facial eczema prevention



**ACTIVE INGREDIENT:** 5% elemental copper (as copper sulphate) as a clear blue solution

**DOSE RATE: Daily dosing:** 1-5ml per cow per day; 1-2ml per adult deer per day; 0.1-0.3ml per adult sheep per day; by drenching, water or feed medication

**Foliar application:** 10L/ha up to 1-2 weeks pre-grazing

**PACK SIZES:** 20L drum



## Copper Sulphate

### For fertiliser or animal health use

- Copper supplement ( $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ) for the prevention and treatment of copper deficiency
- Suitable for oral daily drenching, addition to the drinking water, addition to supplementary feed, foliar application (preferably with a suitable sticking agent) or application with fertiliser



**ACTIVE INGREDIENT:** 25% elemental copper

**USAGE RATES: Daily dosing:** typically 1-2g/cow/day by drenching, water or addition to feed

**Fertiliser:** 5-6kg/ha (sheep and cattle); 12kg/ha (deer); ideally in the autumn

**Foliar application:** 2kg/ha 1-2 weeks pre-grazing will give up to 6 weeks supplementation to grazing stock

**PACK SIZES:** 25kg polypropylene bag (non-branded)





# Trace elements



## Stock Cobalt™

### Convenient ready to use cobalt supplement

- Prevention and treatment of cobalt deficiency
- Use by addition to the drinking water, oral daily drenching, addition to supplementary feed or foliar application (preferably with a suitable sticking agent)



**ACTIVE INGREDIENT:** 1% elemental cobalt (as cobalt sulphate) as a clear red solution

**DOSE RATE:** **Daily dosing:** 1-2ml per cow per day;

1-2ml per 100 adult sheep per day: by

drenching, water

or feed medication

**Foliar application:** 1.25-2.5 L/ha up to 1-2 weeks pre-grazing

**PACK SIZES:** 20L drum



## Cobalt Sulphate

### For fertiliser or animal health use

- Cobalt supplement ( $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$ ) for the prevention and treatment of cobalt deficiency
- Suitable for oral daily drenching, addition to the drinking water, addition to supplementary feed, foliar application (preferably with a suitable sticking agent) or application with fertiliser



**ACTIVE INGREDIENT:** 21% elemental cobalt

**USAGE RATES: Fertiliser:** Capital: 350g/ha;

Maintenance: 175g/ha; ideally in the spring

**Foliar application:** 60-240g/ha 1-2 weeks

pre-grazing will give up to 6 weeks supplementation to grazing stock

**PACK SIZES:** 20kg or 25kg bag or cardboard box (non-branded)



# Flavouring agent



## Sweetwater®

### Makes the water taste better

- Caramel flavouring used to mask the taste and smell of zinc, magnesium, trace elements, bloat remedies and other additives, particularly in stock drinking water but also in drench mixtures or solid feeds
- Encourages water consumption and aids in the effective administration of these additives



**ACTIVE INGREDIENTS:** Caramel flavours and sugars

**DOSE RATE: Drinking water:** 0.5-2ml per litre water or 25-50ml per kg of dissolved additive

**Solid feeds:** 1-2L per tonne of feed

**PACK SIZE:** 20L drum



# Facial eczema - zinc



## Zinc Sulphate Hepta

### Water soluble multi-purpose zinc

- Prevention of facial eczema
- Treatment and prevention of foot-rot and scald
- Treatment and prevention of dermatophilosis (mycotic dermatitis or lumpy wool)
- Use as a dietary zinc supplement



**ACTIVE INGREDIENT:** 22% elemental zinc (as zinc sulphate heptahydrate,  $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$ )  
**DOSE RATE:** **Facial eczema:** 8g/100kg live-weight/day by addition to the drinking water only (do not orally drench at the facial eczema prevention dose rate)  
**Foot-bath or hoof-mat:** 10% solution (1kg into 10L water)  
**Dermatophilosis:** prevention 0.75% solution; treatment 1.5% solution; by spray or dip  
**Dietary supplement:** 1-3g per cow per day; by oral drenching in feed or water  
**PACK SIZE:** 25kg lined polypropylene bag

Registered pursuant to the ACVM Act 1997, No A9256.



## Zinc Sulphate Mono

### Water soluble multi-purpose zinc

- Prevention of facial eczema
- Treatment and prevention of foot-rot and scald
- Treatment and prevention of dermatophilosis (mycotic dermatitis or lumpy wool)
- Use as a dietary zinc supplement



**ACTIVE INGREDIENT:** 35% elemental zinc (as zinc sulphate monohydrate  $\text{ZnSO}_4 \cdot \text{H}_2\text{O}$ )  
**DOSE RATE:** **Facial eczema:** 5.5g/100kg live-weight/day by addition to the drinking water only (do not orally drench at the facial eczema prevention dose rate)  
**Foot-bath or hoof-mat:** 6.5% solution (650g into 10 L water)  
**Dermatophilosis:** prevention 0.5% solution; treatment 1% solution; by spray or dip  
**Dietary supplement:** 0.5-2.0g per cow per day; by oral drenching in feed or water  
**PACK SIZE:** 25kg lined polypropylene bag

Registered pursuant to the ACVM Act 1997, No A9257.



## Zinc Oxide Plus™

### Pre-stabilised to make oral drenching easier

- Pre-stabilised zinc oxide powder (ZnO) for the prevention of facial eczema in cattle and sheep by oral drenching or addition to supplementary feed
- Drenching can either be at long-term rates (ranging from daily to weekly) or crisis rates (daily depending on spore count)
- Can also be used as a dietary zinc supplement



**ACTIVE INGREDIENT:** 80% elemental zinc  
**DOSE RATE:** **Facial eczema:** Long-term rates: from 2.5g/100kg live-weight per day; to 11g/100kg live-weight twice weekly; to 27g/100kg live-weight per week (see label or website for more details)  
**Dietary supplement:** 0.2-1.0g per cow per day; by oral drenching or addition to feed  
**PACK SIZE:** 25kg lined polypropylene bag

Registered pursuant to the ACVM Act 1997, No A9412.



# Facial eczema - fungicides



## Sporeguard®

### Prevent facial eczema without zinc

- Systemic fungicide used to control the facial eczema fungus *Pithomyces chartarum*
- Should always be used with the surfactant Sporewet®
- Sporeguard® and Sporewet® are effective in keeping facial eczema spore counts on pasture below dangerous levels for up to 40 days, hence animals do not ingest harmful numbers of spores and should not require the administration of zinc



**ACTIVE INGREDIENT:** 500g/L carbendazim  
**APPLICATION RATE:** 300ml/ha (with 100ml/ha Sporewet®) in 100-200L water per ha  
**WITHHOLDING PERIOD:** Nil  
**PACK SIZE:** 10L drum

Registered pursuant to the ACVM Act 1997, No P8308.



## Sporewet®

### Get the best from Sporeguard®

- Surfactant for use with Sporeguard® in the control of facial eczema
- Allows the water rate to be lowered to as low as 100L/ha, ensuring better coverage and quicker rain fastness



**ACTIVE INGREDIENT:** Alcohol ethoxylate surfactant  
**APPLICATION RATE:** 100ml/ha (with 300ml/ha Sporeguard®) in 100-200L water per ha  
**WITHHOLDING PERIOD:** Nil  
**PACK SIZE:** 5L container





# Vitamins



## Lift® B<sub>12</sub> Plain

### Injectable B<sub>12</sub> in a pillowpack

- Double strength, injectable vitamin B<sub>12</sub> for the treatment and prevention of cobalt deficiency and vitamin B<sub>12</sub>-responsive conditions
- Each treatment lasts 4-6 weeks



**ACTIVE INGREDIENT:** 2g/L vitamin B<sub>12</sub> (hydroxocobalamin)

**DOSE RATE:** 2-6ml (See label for more detail)

**WITHHOLDING PERIODS:**

**Meat:** Nil; **Milk:** Nil

**PACK SIZE:** 500ml injection pack

Registered pursuant to the ACVM Act 1997, No A9783.



## Lift® B<sub>12</sub> Selenised

### Injectable B<sub>12</sub> and selenium in a pillowpack

- Double strength, injectable vitamin B<sub>12</sub> with selenium, for the treatment and prevention of cobalt deficiency, vitamin B<sub>12</sub>-responsive and selenium-responsive conditions
- Each treatment lasts 4-6 weeks



**ACTIVE INGREDIENTS:** 2g/L vitamin B<sub>12</sub> (hydroxocobalamin) plus 4mg/ml selenium (as sodium selenate)

**DOSE RATE:** 2-6ml (See label for more detail)

**WITHHOLDING PERIODS:**

**Meat:** Nil; **Milk:** Nil

**PACK SIZE:** 500ml injection pack

Registered pursuant to the ACVM Act 1997, No A9784.



## Vita-Mineral®

### An extra boost with iodine, selenium and vitamins

- Stable, water-soluble multi-mineral and vitamin powder for supplementation of sheep and cattle by oral drenching at strategic times (e.g. prior to mating, late pregnancy or during periods of stress)
- The drench solution is made by dissolving 1kg powder (1 sachet) in water to make up to 5 litres solution



**ACTIVE INGREDIENTS:** Each 10ml dose contains 280mg iodine, 2mg selenium, 2.5mg cobalt, 6mg zinc, 20,000 IU vitamin A, 10,000 IU vitamin D and 200 IU vitamin E.

**DOSE RATE:** 50ml drench solution (10 grams powder) per adult cattle

**WITHHOLDING PERIODS:**

**Meat:** Nil; **Milk:** Nil

**PACK SIZE:** 4kg polyethylene bucket (containing 4 x 1kg sachets)



# Nutrition



## Calf Milk Replacer (CMR)

### Premium based whey powder

- 8 x more vitamins than whole milk.
- Contains pre and pro biotics
- Non-curdling



**TYPICAL ANALYSIS:** Protein 23%, fat 20%, lactose 38%, minerals 9.5%, crude fibre <0.2%, moisture 4%

**DOSE RATE:** See label for more detail

**WITHHOLDING PERIODS:**

**Meat:** Nil; **Milk:** Nil

**PACK SIZE:** 20kg polypropylene bag



# Dairy health planner

| STOCK CLASS |  |  |  |  |
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| JUN         |  |  |  |  |
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| STOCK CLASS |  |  |  |  |
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