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The Science of **Animal Nutrition**

Product Guide

September 2022

nutrinza.com

New **Season**
New **Calves**
New **Gains**

BLOSSOM®
CALF MILK REPLACER

volac

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Contents

Blended Feeds

Nutrinza have the ability to custom blend to your requirements. We have a fully computerised and FeedSafe accredited blending plant in our Mount Maunganui store, which ensures accurate and homogenous mixing of your feed and minerals.

Blends are also available from our other regional stores.

Our philosophy is - "If you are going to do the job, do it right". We believe this is essential for the protection and wellbeing of your animals' health.

Pellets / Compound Feed

For those clients that prefer pelleted/compound feed we source cost-effective top quality diets to provide maximum returns.

Bulk Supply

All of our products are available as individual feed components or can be blended to your requirements.

FeedSafe NZ Accredited

New Zealand Feed Manufacturers Association **www.nzfma.org.nz**

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Feed Options

Safe Feeds

Palm Kernel Expeller

Description

Palm Kernel Expeller (PKE) is produced from the mechanical extraction of oil from palm fruit.

Nutritional Benefits

PKE is a good source of oil and rumen fermentable fibre, which usually improves butter fat test.

Although high in Neutral Detergent Fibre, PKE does not cause significant pasture substitution, owing to the high level of rumen bypass NDF in PKE. PKE contains nearly no starch and can be safely fed with ad libitum access in the paddock. It is GM free.

Feeding Recommendations

The quickest and easiest introduction of PKE to your stock can be achieved by making the PKE available free access in the paddock to the livestock in a trough or trailer where the stock can eat the product in their own time. This usually results in dairy cattle consuming 1-2kg/c/d within four days. If feeding in the bail through a silo, it is best to have the PKE mixed with other feeds. Then increase the inclusion rate slowly, being guided by their ability to consume the feed.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	11.6
Crude Protein	14-16%
NDF	65%
Starch	2.1%

Feed Options

Safe Feeds

Soya Bean Hull

Description

Soya beans are primarily processed for their oil, which leads to the generation of two primary by-products – Soya Bean Meal and Soya Bean Hulls. Soya Bean Hulls are the outer coating of the soya bean and this hull is removed when soya beans are processed into Soya Bean Meal. Soya Bean Hulls are quite small in size and are not very dense so are pelleted to increase ease of handling and bulk density. With respect to nutritional value, the loose and pelleted hulls are equal.

Nutritional Benefits

Soya Bean Hulls are a highly digestible fibre source. They can replace both the fibre and some of the grain portion of the diet due to their energy level and digestibility. In diets where forage is being consumed Soya Bean Hulls can have a positive impact on forage intake and digestibility.

Feeding Recommendations

Soya Bean Hulls can be fed from 0.5-5kg per cow per day. Soyabean hulls have a high nutritive value for ruminants and is a highly digestible fibre source. Supplementing diets with soyabean hulls increase rumen microflora flow and rumen fibre digestion.

However, soyabean hulls do not provide the same effective fibre (large particle size) as roughages.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	12.0
Crude Protein	13.5%
NDF	60%
Starch	1.4%

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Feed Options

Protein Feeds

Soya Bean Meal

Description

Soya Bean Meal is obtained from the process of extracting soya oil from the bean.

Nutritional Benefits

Soya Bean Meal is a high protein feed that is highly palatable. Soya Bean Meal would be most aptly fed in early spring or summer when the protein content in the diet may be lower.

Feeding Recommendations

Feed as required when protein is limiting production.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	13.5
Crude Protein	48%
NDF	13%
Starch	1.7%

Feed Options

Protein Feeds

Canola Meal

Description

Canola Meal is a by-product of canola seed oil production.

Nutritional Benefits

Canola contains 30-35% rumen undegradable (bypass) protein and the other 65-70% is degraded in the rumen. This is quite similar to the protein fraction in Soya Bean Meal. Therefore, Canola works well in diets that are low in rumen degradable protein, e.g. when over 40% of the diet is low protein feeds such as maize silage, whole crop silage, stalky grass silage or grain. GM free option available.

Feeding Recommendations

The benefits of Canola Meal are best captured in a balanced feed ration and normally feeding rates for dairy cows are 0.5-2kg DM per day. In grain mixes inclusion rates range from 10-30%.

Canola Meal is best fed as part of a customised feed blend in the shed. Feed as required when protein is limiting production.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	11.7
Crude Protein	38%
NDF	26%
Starch	1.5%

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Feed Options

Protein Feeds

Dried Distillers Grains

Description

Corn Distillers Grains with Solubles is the main by-product of the distillation of alcohol and industrial ethanol from maize grain. Corn DDGS is golden in colour.

Nutritional Benefits

Corn DDGS is rich in protein and moderately rich in fat. One benefit of Corn DDGS over cereal grains is that, as their energy is primarily provided as readily digestible fibre and fat, they have a propensity to alleviate incidence and severity of acidosis, and fatty liver caused by rumen starch fermentation.

Feeding Recommendations

As a rule, a maximum of 30% (diet DM) DDGS should be included in the ration.

DDGS is ideal for increasing the palatability of feed blends, especially when minerals are included.

Increase inclusion rate when protein is limiting production.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	13
Crude Protein	30%
NDF	29%
Starch	6%

Avon

Description

Avon feed (also known as corn gluten meal) is a by-product from starch/glucose manufacturing, derived from maize.

Nutritional Benefits

Good source of energy, mostly coming from possessing moderate levels of both crude protein and starch.

Feeding Recommendations

Ideally used in early spring if there are low amounts of pasture in the diet.

Note:

Only available for blending via Mount.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	11.1
Crude Protein	18.2%
NDF	46.8%
Starch	14.4%

Feed Options

Protein Feeds

Sunflower Pellets

Description

Sunflower meal is the by-product of the extraction of oil from sunflower seeds. The meal is pelletised to increase the density and improve flow in silos.

Nutritional Benefits

Sunflower Pellets are high in protein and fibre with moderate energy levels. It has a higher % of rumen degradable protein, making it an ideal supplement when pasture protein is limited. It is considered a safe feed for all ruminants and can be fed in troughs or via in-shed systems. Sunflower meal is a rich source of B-complex vitamins. It is GM free.

Feeding Recommendations

Feed as required when protein is limiting production.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	10.7
Crude Protein	34%
NDF	38%
Starch	1%

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Feed Options

Energy Feeds

Kibbled Maize

Description

Maize grain is one of the best sources of energy and carbohydrate for the lactating cow and also ideal for weight gain.

Nutritional Benefits

Highly digestible and slow release in the rumen, maize grain is a great choice for maximising peak in the spring. It is GM free.

Feeding Recommendations

Feeding maize requires a transition for the cow because of the high starch content - so gradually increase intake over time. Feed maize as required between 2kg and 4kg per cow per day to maximise output.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	13.5
Crude Protein	9%
NDF	13%
Starch	73%

Tapioca

Description

Tapioca comes from Casava plant tuber/root and is grown in the Tropics.

Nutritional Benefits

Tapioca is a high quality energy supplement, but is low in protein. It is GM free.

Feeding Recommendations

The risk of acidosis is high due to the high starch content and the finely ground nature of the feed before being pelletised. If cows are allowed ad libitum access there is a significant risk of rumen acidosis and death. Therefore feeding ad libitum in bins is risky and should only be fed as a blend with PKE/ Soya Bean Hulls at no more than 25% tapioca: 75% PKE or Soya Bean Hull.

If fed in the shed where intake is controlled you can feed up to 2.5kg/c/day in the spring and 2.0kg/c/day in mid to late lactation as long as the normal protocol of gradual introduction is followed (begin with 0.5kg/ day of Tapioca and increase by 0.5kg/day to desired amount).

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	12.5
Crude Protein	3%
NDF	12%
Starch	50-55%

Feed Options

Energy Feeds

Hominy

Description

Hominy is a high quality by-product from Maize milling and is a high energy feed that is excellent for feeding during early lactation to minimise weight loss and maximise peak milk production.

Nutritional Benefits

Hominy aids palatability, has good hydration properties and is a good carbohydrate source of energy. It can also contribute significant amounts of calcium, iron, riboflavin and thiamine to diets. Due to its high quality, Hominy is a very digestible feed but care does need to be taken to avoid over-feeding. It is GM free.

Feeding Recommendations

Due to the high starch content a gradual introduction is recommended. Once animals have adapted to a higher starch diet, Hominy can be fed at between 2kg to 4kg per cow per day to maximise production.

Typical Nutritional Analysis

DM	86%
ME (MJME/kg DM)	13.0
Crude Protein	11%
NDF	15%
Starch	55%

Vat Buster

Description

Vat Buster is a mix of ingredients designed to maximise production. It is a 5mm pellet that is great in a blend or on its own.

Nutritional Benefits

Vat Buster is a mix of grains and proteins that will help your animals maximise output. Great for driving and holding peak lactation and will help put your cows into a positive energy balance.

Feeding Recommendations

Feed as required to maximise return. Managed feeding is required at 2kg to 6kg per cow per day.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	12.5
Crude Protein	16%
NDF	30%
Starch	30%

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Feed Options

Energy Feeds

High Starch Pellet

Description

Nutrinza's High Starch Pellet is a grain pellet and an excellent source of energy.

Nutritional Benefits

The high maize content makes it an ideal slow release starch option during lactation. Providing adequate amounts of starch promotes rumen bacterial growth that will enhance forage digestibility, rumen contractions and subsequent feed intakes. It is an ideal choice to increase and maintain peak production during spring. It is pelletised, reducing wastage and improve flow in silos.

Feeding Recommendations

Due to the high starch content a gradual introduction is required. Once animals have adapted to a higher starch diet, the High Starch Pellet can be fed at between 2kg to 4kg per cow per day to maximise production. Due to its low protein content it must be properly complemented with a protein source from pasture/other protein feed options, as well as fibre.

Typical Nutritional Analysis

DM	88%
ME (MJME/kg DM)	13
Crude Protein	13%
NDF	25%
Starch	45%

Feed Additives

Megalac™

Description

A highly-proven, rumen protected bypass fat, Megalac is a source of energy to support body condition, fertility and production. Megalac is a calcium salt of palm fatty acids.

Nutritional Benefits

- **High energy density**
  - ME = 33.3 MJ/kg DM
  - 96% digestibility
- **Minimises Body Condition Loss**
  - Helps fill the energy gap of early lactation to minimise condition lost
  - Increases energy of diet without increasing acid load in the rumen
  - Bypass means it avoids disruption to fibre digesting bacteria in the rumen
- **Supports Fertility**
  - Targeted energy improves fertility and in-calf outcomes
  - Increases follicle size to improve chances of pregnancy
  - Supports progesterone production to maintain early pregnancy
- **Increases Milk Production**
  - 18 studies show an average increase of +2.3 litres/cow/day when fed 500g Megalac per day
  - Improved feed efficiency from more energy dense feed
  - Over 13% less methane produced per kg milk = more efficient production

Feeding Recommendations

Feed between 0.2 to 0.5 kg/c/d.

Product available in blends. Also available direct to farm in 25 kg bags (1 tonne minimum delivery) or 800 kg bulk bags (1.6 tonne minimum delivery).

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Feed Additives

Plant-based Feed Grade Oil

Description

Nutrinza's plant-based oil is the ideal product to include in feed blends to address dust related issues at minimal inclusion rates. Our plant-based oil consists mainly of Canola oil with other plant-based oils (no palm oil) added at low inclusion rates.

Benefits

- Oil suppresses dust at very low inclusion rates. Just 1% inclusion is all that is required to suppress dust in most instances. Less dust has the following tangible benefits:
  - » Improved animal health by reducing dust inhalation.
  - » Less wastage as it reduces the feed blown out of in-shed feed troughs.
  - » Largely eliminates eye irritation in the dairy shed for staff.
- No build-up of feed on feed auger systems (compared to molasses for example). This reduces time consuming unblocking and cleaning of in-shed feed systems and silos.
- Less wear on feed system motors and augers due to the lubricating effect of oil.
- Oil is one of the highest energy feed sources available. It has a ME of 37MJ/kg DM. Added at 1% of the feed lifts ME by an average of 0.25 MJ/kg DM.
- Adding oil to blends reduce the possibility of feed separation, especially finer minerals, during transport and silo storage.
- Due to the special application method used in the Nutrinza blending process, the oil is thoroughly mixed in the feed. The feed stays dry.
- On a Dry Matter (DM) and energy (ME) basis it offers better value for money compared to PKE/Molasses mixes available in the market.
- Due to the lower sugar and higher dry matter % the shelf life of blends containing oil is longer than blends containing molasses.

Blend inclusion recommendations

Dust suppression in blends is achieved at an inclusion rate of only 1%. Slightly higher inclusion rates can be considered for blends containing very dusty products or blends containing higher than normal mineral inclusion.

Typical Feed Grade Oil Nutritional Analysis

DM	100%
ME (MJ/kg DM)	37
Crude Fat	100%
NDF	0%

Nutrinza Mineral Options

Description

Nutrinza offers a cost-effective range of minerals for inclusion in feed blends. This range provides adequate quantities of the 3 main macro minerals (calcium, magnesium and salt) for lactating cows. We also offer the macro minerals with Bovatec, trace minerals and Zinc (during FE season).

Nutritional benefits

Nutritional benefits Daily supplementation of macro minerals is crucial to replace minerals used in milk production – putting back what we take out. It is also critical for optimum rumen functioning and cow health. Bovatec has proven benefits in terms of increased production, bloat control, reduction in ketosis and control of Coccidiosis. Trace minerals and vitamins are required for higher production cows.

Nutrinza Mineral range

- **Max Mineral Standard**
  - At 200g/c/d this provides the cow with
    - » 60g Elemental Calcium
    - » 15g of Elemental Magnesium
    - » 9g of Elemental Sodium
- **Max Mineral Standard plus Bovatec or Rumensin**
  - This option provides the standard macro minerals plus 1.5g of Bovatec or Rumensin for increased production and bloat control.
- **Max Mineral Standard with Cowmin5**
  - Offers standard macro minerals plus 5 trace minerals (copper, cobalt, selenium, iodine, zinc)
- **Max Mineral Standard with Cowmin5 plus Bovatec**
  - Offers standard macro minerals plus 5 trace minerals (copper, cobalt, selenium, iodine, zinc) as well as 1.5g of Bovatec 20CC
- **Max Mineral Standard with Zinc**
  - Provides 9.6g of Elemental Zinc (12g of Zinc Oxide). For facial eczema season.

Feeding rate

200g/c/d in feed blends.

Rumensin ® is a registered product under the ACVM Act 1997, A9107
Bovatec ® 20cc, a registered product under the ACVM Act 1997, A9679

Download our new blend calculator app

With Nutrinza you can now formulate your own customised blends to meet your herds requirements, nutritional specifications and budget.

New **Season**
New **Blends**
New **App**

Mineral Options

Sollus Tranzsol™ Minerals

Additives for Transition

A transition cow vitamin and mineral supplement to aid in the prevention of milk fever, maintain immune response and benefit subsequent re-breeding

Description

TRANZSOL™ from Sollus is formulated to be the easiest and best transition supplement for New Zealand dairy cows. It incorporates antioxidants, magnesium and, most importantly, Rovimix Hy-D®.

Nutritional Benefits

Using anionic salts (TRANZSOL™) in combination with the vitamin D metabolite, Rovimix HyD® is proven to have beneficial effects in hormonal and physiological adaptation of the cow to mobilise calcium, reducing the risks of milk fever. Providing the essential minerals and vitamins during this crucial period reduces the risks of metabolic disease, has a beneficial impact on subsequent re-breeding and is important in maintaining immune function.

TRANZSOL™ is formulated for diets containing approx. 50% pasture, however it can still be fed with all pasture diets[1].

Feeding Recommendations

Start when cows begin to show signs of springing (typically 14 days before calving) and continue into the colostrum herd.

Feeding options:

- TRANZSOL Mineral Blend as part of your Nutrinza feed blend. 380g/cow/day for 14 days pre-calving + colostrum herd
- Feed TRANZSOL Nucleus at 100g/c/d. Must be combined 100g/c/d of MgCl and 280g/c/d of lime flour/ag lime.
- TRANZSOL Complete at 480g/c/d (MgCl & Lime added)
- Ensure TRANZSOL is mixed evenly through feed

Nutritional information

Vitamin A, Vitamin E, Vitamin D3, Iodine, Zinc, Rovimix® Biotin, Rovimix Hy-D, Calcium, Cobalt, Copper, Selenium, Magnesium, MOS, Sulphate, Chloride, Avatec ® / Bovatec ®.

Avatec® / Bovatec® is a registered product under the ACVM Act 1997, A10829

[1]Feed a maximum per day of 6kg grass or grass silage

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Mineral Options

Sollus Lactisol™ Minerals

Additives for Lactating Cows

A vitamin and mineral supplement supporting the high demands of lactation, with long term benefits that supports the cow fundamentally

Description

Lactisol™ from Sollus provides the vitamins and minerals required to support the cow during lactation and her productive lifecycle, minimising metabolic disease and improving health and production.

Nutritional Benefits

Lactisol is formulated to meet the nutritional requirements of cows when grazing pasture and consuming meals/silage. In combination with Tranzsol™ in the transition period, Lactisol provide the right elements for mineral absorption. Optimum absorption of Calcium and Phosphorus is required for strong healthy cows, putting back what we take out.

Lactisol includes the following:

1. Provides the "next generation" source of Vitamin D, Rovimix Hy-D®, which ensures optimum up take of Vitamin D and utilisation within the animal.
2. Is a source of biotin which is essential for the synthesis of keratin in hooves and for energy uptake in the liver.
3. Is a source of Zinc which is a component of a wide variety of enzymes and proteins supporting metabolism, growth, production, and reproduction. Zinc is required for production of protective keratins in the hoof and teat. Contains multi stage release Zinc compounds for optimal uptake and utilisation.
4. Antioxidants to improve health and support the cow's immune system to fight infection.
5. Is a source of ruminally available Magnesium for a better, safer response.
6. Lactisol Range includes
   - 400: Macro and Trace minerals plus Biotin
   - 500: Macro and Trace minerals, Biotin, Vitamins, Hy-D and Monensin
     - for cows with MS production at or close to body weight
   - 600: Macro and Trace minerals, Biotin, additional Vitamins, Hy-D and Monensin
     - for top production cows

Feeding options:

- Lactisol 500 Mineral Blend as part of your Nutrinza feed blend. 200g/cow/day
- Feed Lactisol Nucleus at 25g/c/d. Must be combined with 135g/c/d of Lime and 40g/c/d of Salt.
- Lactisol Complete at 200g/c/d

Nutritional information

Vitamin A, Vitamin D3, Vitamin E, Hy-D, Biotin, Cobalt, Iodine, Copper, Zinc, Magnesium, Selenium (8mg/200g), Calcium, Sodium Chloride, Rumenox®.

Rumenox® 400G is a registered product under the ACVM Act 1997, A11418

Mineral Boost Granulated

MineralBoost CLASSIC

The base of all formulations
QA assured granulated minerals

Elemental profile

Each 200 gms contains

Calcium	46 gms
Magnesium	10 gms
Sodium	12 gms

MineralBoost Rumensin

Rumensin® Registered Trademark of Ell Lilly and company.
Rumensin® Millmix is registered pursuant to the ACVM Act 1997. No A9107.

Elemental profile

Each 200 gms contains

Calcium	48 gms
Magnesium	10 gms
Sodium	10 gms

Rumensin®

Monensin	300 mg

MineralBoost MAX

Rumensin® Registered Trademark of Ell Lilly and company.
Rumensin® Millmix is registered pursuant to the ACVM Act 1997. No A9107

Elemental profile

Each 200 gms contains

Calcium	46 gms
Magnesium	10 gms
Sodium	10 gms

Rumensin®

Monensin	300 mg

Bioplex® High Five organic trace elements

Zinc	300 mg
Copper	125 mg
Cobalt	12.5 mg
Iodine (as EDDI)	8.3 mg
Selenium (as Sel-Plex®)	3 mg

MineralBoost ZINC

MineralBoost Zinc® is registered pursuant to the ACVM Act 1997. No A10914. Mineral supplement for the prevention of facial eczema in cows. The 200gm dose rate is designed for a 450kg cow.

Elemental profile

Each 200 gms contains

Calcium	48 gms
Magnesium	8 gms
Sodium	10 gms
Zinc	9.6 gms (12 gms zinc oxide)

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MineralBoost
PRE-CALVE BLEND

MineralBoost
PLUS

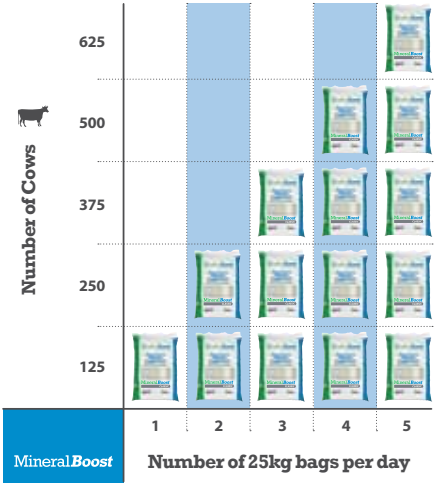
MineralBoost
HI-MAG

MineralBoost
BOVATEC 20CC®

RECOMMENDED DOSE RATE

200 gms / cow / day

Based on 450 - 500 kg live weight cow. Consult your nutrition advisor regarding altering dose rates.



MINERALBOOST INCLUSION RATES

Percentage & kg / tonne

PKE, meal blends & silages

Total ration feed rate per cow per day	MineralBoost Percentage in total feed ration	MineralBoost per Tonne of total feed ration
2 kg	10%	100 kg / tonne
3 kg	7%	70 kg / tonne
4 kg	5%	50 kg / tonne
5 kg	4%	40 kg / tonne
6 kg	3.4%	50 kg / tonne

25 kg Bag
= 125 Doses

1 Tonne Bag
= 5,000 Doses

Trace Mineral Premixes

These trace mineral blends have been developed for on-farm addition to feed blends or liquid trace mineral supplementation.

Ultramin Sel-Gold™
(GREEN LID)

Description

Nutrinza Ultramin Sel-Gold is a soluble mixture designed to be administered to lactating dairy cows through the drinking water (troughs and in-line), via power drenching systems or mixed with feed.

If this product is applied to feed (rather than dissolved and administered as a drench or in the water via a mixed with 45g of a carrier to 5g of Ultramin Sel-Gold (ratio of 9:1) so that the combined application rate is 50g/cow/day.

The dose rate may be adjusted by a qualified nutritionist or vet depending on an assessment of the herd's current mineral status, and level of production being targeted.

This is a soluble product suitable for water dispensers, drenching or applying via the feed.

Provides the following per dose (5g dose per cow per day):

Copper	250mg
Cobalt	4mg
Iodine	10mg
Selenium	4.5mg
Zinc	800mg

Ultramin Sel-Gold No Copper™
(RED LID)

Description

Nutrinza Ultramin Sel-Gold is a soluble mixture designed to be administered to lactating dairy cows through the drinking water (troughs and in-line), via power drenching systems or mixed with feed.

If this product is applied to feed (rather than dissolved and administered as a drench or in the water via a 'dosatron' of some form) then it should first be carefully mixed with 45g of a carrier to 5g of Ultramin Sel-Gold (ratio of 9:1) so that the combined application rate is 50g/cow/day.

The dose rate may be adjusted by a qualified nutritionist or vet depending on an assessment of herd's current mineral status, and level of production being targeted.

This is a soluble product suitable for water dispensers, drenching or applying via the feed.

This option is mainly used during the facial eczema season.

Provides the following per dose (5g dose per cow per day):

Cobalt	4mg
Iodine	10mg
Selenium	4.5mg
Zinc	800mg

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Calf Products

Mega Max Calf Starter

Description

Mega Max Calf Starter is a unique calf feed concept available from Nutrinza. We have received great feedback from our clients on the palatability, uptake and growth rates achieved from Mega Max Calf Starter.

Nutritional Benefits

A mixture of whole grains and a protein pellet provide a combination that has been designed to maximise early rumen development. The whole grains provide the starch for growth and development without causing acidosis in the young calf. It has been trialled in America on 250,000 calves and used widely in the industry. We have also trialled the product in New Zealand on more than 2500 calves and seen great results. The calves love the whole grains and cud them like cows do grass, which provides the saliva to build the rumen in the infant calf. Mega Max Calf Starter contains Bovatec™ for control of coccidiosis, vitamins, trace elements and probiotic for good health.

Feeding Recommendations

Mega Max Calf Starter is designed to be fed ad-lib from 4 days of age until weaning. There is no need for straw or hay to be fed as the fibre is provided by the grains in the feed. Available bagged (with molasses) or in bulk for silos (with molasses in pellet).

Typical Nutritional Analysis

ME (MJME/kg DM)	12
Crude Protein	18%
NDF	21%

Bovatec® is a registered product under the ACVM Act 1997, A9679

Mighty Max Calf Grower

Description

Mighty Max Calf Grower pellets are designed to grow calves. It is a cost effective pellet designed to be fed from day 4 to weaning. It has proven to be a very palatable feed and therefore increases intake quickly.

Nutritional Benefits

Mighty Max Calf Grower is formulated to grow calves and we have worked with professionals around the world to build Mighty Max Grower. The energy and protein has been put together to maximise growth. Mighty Max Grower contains Bovatec™ for control of coccidiosis, vitamins, trace elements and a probiotic to promote good calf health.

Feeding Recommendations

Feed from day 4 to weaning ad-lib to maximise intake and growth. Available bagged (with molasses) or in bulk for silos (molasses inside pellet).

Typical Nutritional Analysis

ME (MJME/kg DM)	12
Crude Protein	18%
NDF	24%

Bovatec® is a registered product under the ACVM Act 1997, A9679

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Blossom Hi-Spec

Calf Milk Replacer

Description

Blossom Hi-Spec is a whey-based calf milk replacer made from Immunopro®; a unique process that concentrates the bioactive goodness of milk for the benefit of the calf.

Nutritional Benefits

- Formulated to support 900g average daily gain*
- High levels of limiting amino acids and nutrients to encourage skeletal growth
- Easy to mix in warm or cold water.

Feeding Recommendations

After colostrum is completed, feed Blossom Hi-Spec all the way through to weaning. Ideal for robotic calf feeders, twice-a-day, once-a-day, and ad lib feedings. Mix 150g Blossom with 850 ml water for 1litre of milk replacer. Full feeding programme online at:

nutrinza.com

*Based on feeding 900g Blossom Hi-Spec as 6 litres of milk replacer a day

Typical Nutritional Analysis

MJ ME/kg DM	19.6
Protein	25%
Fat	17%
Sugar	46%
Ash	7.5%
Moisture	3.5%

FortiMILK™ GOLD Calf Milk Additive

A calf milk supplement to support calf health, growth performance and control protozoa disease throughout the milk feeding period.

Description

FortiMILK GOLD is formulated as an easy to mix supplement for infant calves. It incorporates Bovatec®, Celmanax™, protected vitamins and chelated trace minerals, antioxidants, and most importantly a high-dose, calf-specific probiotics.

- Celmanax™ provides a resistance to Cryptosporidium spores.

Nutritional Benefits

Whole milk from the modern commercial dairy cow often fails to meet the basic vitamin and trace mineral requirements of young milk-fed calves (data on file). These can be met by supplementing whole milk with FortiMILK GOLD - specifically designed to supplement the daily requirements of fast growing pre-ruminant calves and maximise health and growth potential.

Also contains high-dose probiotics and Celmanax to establish and maintain beneficial micro-flora balance in the gut, supports positive calf performance, gut health and immunity. Bovatec is known to prevent and control protozoa in infant calves – especially Coccidiosis infections.

FortiMILK GOLD is the ideal additive for rearing healthy calves in concentrated calving operations.

Bovatec® is a registered product under the ACVM Act 1997, A9679

Feeding Recommendations

For best results add FortiMILK GOLD to milk feed from 24 hours after birth and continue for the duration of milk feeding.

DO NOT FEED TO NEWBORN CALVES WITHIN THE FIRST 24 HOURS OF LIFE.

Excessive consumption of ionophores or use within the first 24 hours of life may result in ionophore toxicity in young calves.

Concurrent use of milk additives that contain Ionophores e.g. (lasalocid or monensin) should be avoided or carefully monitored.

Toxic to dogs, horses and other equids.

Feeding options:

- Add FortiMILK GOLD to whole milk or non-medicated calf milk replacer
- Feed full dose in the morning milk feed – can be fed in divided dose over 2 milk feeds daily

Nutritional information

Vitamin A, Vitamin D3, Vitamin E, Vitamin C, Biotin, B-group vitamins (B1, B2, B3, B5, B6, B9, B12), Vitamin K3, Zinc (glycine chelate), Manganese (glycine chelate), Copper (glycine chelate), Cobalt (glycine chelate), Iron (glycine chelate), Selenium (glycine chelate), Iodine, Lasalocid (Bovatec®), Celmanax™, ProfeSTART™ Probiotic calf-specific blend

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Product Specification Quick Reference Chart

Product	DM %	ME	CP %	NDF %	Starch %	C FAT %
Avon	88	11.1	18	46.8	14	5
Canola Meal	88	11.7	38	26	1.5	3.5 - 5
Dried Distillers Grain (DDGS)	88	13	30	29	6	7
Hi-Starch Pellet	88	13	13	25	45	3
Hominy	86	13	11	15	55	4
Maize (Kibbled / Whole)	88	13.5	9	13	73	4
Palm Kernel Expeller	88	11.6	14 - 16	65	2.1	7 - 9
Soya Bean Hull	88	12	13.5	60	1.4	3
Soya Bean Meal	88	13.5	48	13	1.7	2
Sunflower Pellet	88	10.7	34	38	1	2
Tapioca (Crushed / Whole)	88	12.5	3	12	50 - 55	1
Vat Buster	88	12.5	16	30	30	4

Disclaimer

Product information provided is given on the basis of Nutrinza knowledge at the time of publication.

Nutritional information is based on accredited feed nutrition sources and sample test results. Specifications on an individual feed test will show some variation.

All animal feed products should be fed as part of a healthy balanced diet matched to the specific requirements of the herd. Nutrinza makes no representations or warranties of any kind, express or implied, as to the suitability of any of the products supplied to the specific requirements of your animals.

Please note that recommended feeding rates are given as a guideline only and will vary based on the total diet and actual feed intake of your animals. It is recommended that you consult your vet, nutritionist, feed expert or farm consultant before making any dietary changes.

Silage Inoculants

Ecosyl™ 100

Description

Ecosyl 100 silage inoculant is ideal for grass and legume silage. A proprietary L. *plantarum* strain MTD/1 works quickly and efficiently on a wide range of pH, temperature and dry matter to help make consistently better silage.

Nutritional Benefits

- Reduces fermentation DM losses
- Preserves nitrogen as true protein
- Makes better use of available sugars
- Improves DM recovery +3.6% (28 trials)
- Improves protein preservation +3.5% (22 trials)
- Increases digestibility of silage (26 trials)

Use Recommendations

- One bottle treats 100 MT of silage
- 24-month shelf life in a cool, dry place

Ecocool™

Description

Ecocool silage inoculant is ideal for managing heating and aerobic spoilage of maize, grass and cereal silages. A combination of *L. plantarum* MTD/1 and *L. buchneri* strain PJB/1 drives efficient fermentation and aerobic stability.

Nutritional Benefits

- Lower DM losses through heating
- Higher energy feed
- Less physical wasteage
- Improves fermentation profile with MTD/1
- Increases aerobic stability; +67 hours before heating up
- Inhibits yeast and mould growth vs untreated silage

Use Recommendations

- One bottle treats 100 MT of silage
- 24-month shelf life in a cool, dry place

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HYBRID MAIZE SEED

HSR Seeds has been breeding hybrid maize seed in Australia for over 40 years with genetics selected and trialed from both Northern and Southern Hemispheres and supplying these into the New Zealand market for the last 10 years.

Despite competing with multinational corporations, we're proud to say that we are Australian and New Zealand owned. Our developments in hybrid seed are helping Australians and New Zealanders to grow better crops, enhancing our nations' reputation for quality produce worldwide.

HSR Seed's hands-on, down to earth research and development into new hybrid seeds has made a significant impact on the Australian and New Zealand maize industry for decades. We carry out the majority of our initial research and trial work at the HSR Seeds Research Stations in Queensland, NSW and Victoria and New Zealand. Tests on more promising varieties are then carried out at numerous trial sites on properties throughout the maize growing areas of Australia and New Zealand, under a wide range of environments and growing conditions. We constantly work with plant breeding partners worldwide to source quality genetic material that we can work with to develop new exclusive varieties, with superior traits to those currently available.

Until their conclusion in 2019, HSR hybrids featured in the independent FAR Maize Performance Trials and scored highly in comparative trials results from around New Zealand.

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HSR Hybrid Range

Titus (82CRM)

Great for quick maize silage in northern regions and a great full season maize silage in southern regions of New Zealand, or for growers that plant or harvest out of the key operating window or need quality early season feed. It is designed principally for the silage producer who wants a quick turnaround with an excellent yielding/quality maize silage for its maturity or for regions with limited growing days.

Asterix NEW

Introducing HSR's 85CRM "starchy silage".

Great for very quick Silage or Grain to fill that void these tough seasons can create, or for planting/harvesting outside of key operating window in North Island regions. Showing great results in Southern regions where this fits into therowing window. Growers seeking high yield at this CRM with excellent standability and disease tolerance, should be growing Asterix.

Obelix (94CRM)

Known as the "The Pillar of Strength" Obelix is proving to be a winner on farm here in New Zealand and Australia after its success in the trial programme. Obelix is a 94 CRM hybrid which has been developed by the HSR team of global breeding partners to fill this maturity space within our hybrid range. With its great stature and cob placement, coupled with quick cob turn down it is proving to be a winner with grain growers also. Obelix shows strong disease resistance and is suitable for growing in all North Island regions. A solid performer with extreme early growth.

Maximus (102CRM)

Very highly productive HSR Seeds 102 CRM soft feed/silage maize. Maximus® is a hybrid that produces a large bulky plant with a root system to match, and has extremely high water use efficiency. A maize plant that is designed principally for the grower who wants a large robust plant with an excellent grain yield or top yielding/quality maize silage. Produced great results in independent FAR Maize Trials across New Zealand. Farmers that want a stable hybrid that is still performing exceptionally well across environments should look at Maximus®. A long-established very reliable performer in the marketplace.

Brutus (105CRM)

Brutus from HSR Seeds is a 105 CRM soft feed/silage maize. Brutus is a hybrid that has extremely high water-use efficiency and exceptional yield for its maturity. It has an early–season growth habit that allows versatility and flexibility in sowing and harvest. It is designed for the maize grower who wants a crop that stands well, with an excellent silage yield/quality or high yielding grain. Best grown in a wide range of environments throughout New Zealand. Growers in warmer regions looking for a reliable, high yielding, excellent disease tolerant and standability package in an early-maturing maize hybrid, should be growing Brutus. Great 'staygreen' in this hybrid which is noticeable among hybrids in this CRM range.

Goliath (110 CRM) NEW

An exciting new HSR hybrid for Spring 2022. Developed in Australia as a dual-purpose hybrid with a fit for both silage and grain, it has impressed in New Zealand hybrid assessments in both yield and its' overall agronomic package. A tall plant with large cobs and bold 'dent' kernels makes it an ideal option for a full-season silage crop. It has a high stress tolerance, good water use efficiency (WUE) and produces good quality silage with excellent levels of grain. The medium-soft kernels provide readily available starch for effective digestion. Growers seeking a full season hybrid that delivers big results should look to grow Goliath this on their farm.

Pegasus (116CRM) NEW

Bred for yield, disease tolerance and adaptability. A medium to tall leafy plant with large, bright yellow kernels, this hybrid is a true 'dual purpose' that finds a fit with both silage and grain growers in Australia but will have a silage focus for the New Zealand market. Characterised by a large cob, the dent x flint grain this hybrid produces is of medium density……..perfect for feed grain or high quality silage. Above average stress tolerance enables this variety to hold on when the going gets tough!

SEED NOW GROWN IN NZ BACKED BY AUSTRALIAN SEED STOCKS		Titus	Asterix NEW	Obelix	Maximus®	Brutus	Goliath NEW	Pegasus NEW
	CRM	82	85	94	102	105	110	115
	Plant Height	Medium	Medium	Tall	Tall	Tall	Tall	Med/Tall
	Grain Density	Hard	Medium	Medium	Soft	Medium	Medium	Medium
Trait Scores	Stress Emergence	9	9	8	9	9	9	9
	Stalk Strength	8	8	9	9	9	9	9
	Stay Green	6	7	8	8	8	8	8
	Husk Cover	7	7	8	8	9	9	8
	Leaf Blight	7	7	8	7	8	8	9
	Cob Rot	9	9	8	7	8	8	8
	Rust	8	8	8	9	9	8	8

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nutrinza.com/product/hsr-maize-seeds
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Accurately monitor your herd's health and fertility

AfiCollar

Gain actionable insights on **rumination, eating, heat detection, health monitoring** and more with Afimilk's latest cow monitoring neck collar. With its long-life battery **the new Afimilk neck collar integrates with AFiFarm** herd management software to enable informed, profitable decisions about your herd.

How does AfiCollar work?

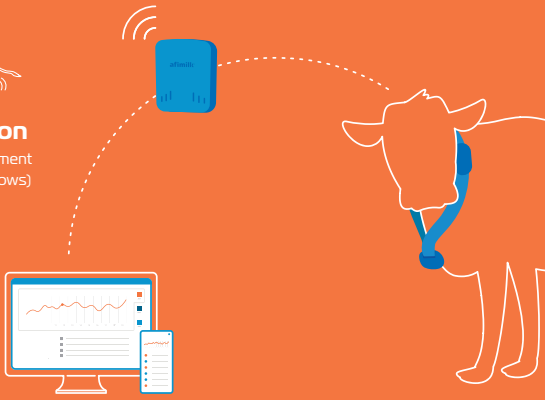
AfiCollar uses a proprietary 3D accelerometer to effectively monitor the motion patterns of a cow's head. It accurately distinguishes between:

Rumination

Eating

Heat detection

(Increased head movement from mounting other cows)



1. AfiCollar sends the data wirelessly to our reader.
2. The reader transfers all data to our herd management software, AfiFarm.
3. The farmer receives real time information on which cows need attention.

Actionable insights

1. **Heat detection:**
   AfiCollar detects the increase in, and irregular movement of a cow's head when in heat.
   - ✓ Accurate, giving you the time that heat signs started.
   - ✓ Saves time and money invested on visual heat detection.
   - ✓ Makes pre-mating heat checks easy.
   - ✓ Identify silent heats/irregular cycles/anoestrous cows.
   - ✓ Decrease physical and disease risks on farm by eliminating bulls.

2. **Monitor individual cow health:**
   A decrease in rumination and/or eating allows you to identify sick cows before they show signs of illness:
   - ✓ Mastitis
   - ✓ Sub-clinical rumen acidosis
   - ✓ Ketosis
   - ✓ Post calving disease/distress – milk fever, retained placenta, metritis, pyometra.
   - ✓ Displaced abomasum

3. **Monitor group nutrition:**
   Measuring eating and rumination on a herd/group level alerts the farmer early to any digestive issues that may cause a drop in milk production:
   - ✓ Keep an eye on herd rumination when transitioning onto fodder crops.
   - ✓ Eating time can give an indication of pasture quality and quantity.
   - ✓ Monitor eating and rumination when introducing a new feed/ration.

EARLY IDENTIFICATION = EARLY INTERVENTION & ABILITY TO MONITOR RECOVERY = SHORTER DURATION OF TREATMENT AND QUICK RETURN TO MILK PRODUCTION POTENTIAL

Headlands

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Ahead of the Game

Nutrinza, helping farmers improve efficiencies, reduce herd wastage and improve profitability through the best possible combination of science and nutrition.

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