

VitaLife

Naturally Improving your Soil Structure

What is it?

VitaLife is a range of products that include calcium, organic matter and beneficial fungi. This special fungi improves plant growth by controlling pathogenic fungi. The **VitaLife** products include VitaLife Magnesium Plus, VitaLife Magnesium, VitaLife Calcium and VitaLife Carbon. All VitaLife products are BioGro Certified.

How VitaLife Works

VitaLife increases the development of humus, which is the organic "glue" in the soil. It is made from the breakdown of organic matter by beneficial bacteria and fungi. **VitaLife** is an excellent medium for the growth of beneficial fungi. It also contains a range of working bacteria-based plant growth enhancers that help with disease resistance. Specific microbes have been included to fix nitrogen from the environment.

Your Ground Force

VitaLife products are carefully designed to restore tired and deficient soils back to good health. The majority of agricultural soils are fungi-deficient. That results in low brix levels, low calcium and phosphate levels in the leaf, reduced disease resistance and poor calcium retention.

VitaLife helps by increasing the development of humus. It's formed by beneficial fungi and bacteria and alongside earthworms, decompose the surface litter to provide rapid humus development. The more humus in the soil, the more nutrients are stored and available for plants.



What is in VitaLife?

VitaLife restores the soil while at the same time protects against harmful elements.

The net result is improved plant growth. The ingredients in VitaLife are the key:

- ✓ Fungi: our beneficial fungi controls pathogens by directly attaching parasites that compete for nutrients and space.
- ✓ Microbes: we add a tested range of working bacteria-based plant growth enhancers that are proven to control plant pathogens.
- ✓ Targeted bacteria: we can also add selected strains of bacteria to control grass grub.
- ✓ Magnesium: is a powerful soil conditioner but we also add organic matter to enhance the natural organic cycle even more
- ✓ Calcium: is the most important soil nutrient. It governs the uptake of other nutrients, including the oxygen needed for good soil health.



The Fertilizer New Zealand Difference

VitaLife has been carefully designed to meet the demand for better soil. The majority of agricultural soils are now fungi deficient which can explain low brix levels, low calcium and phosphate levels in the leaf, and limited disease resistance. VitaLife products work to restructure the soil. We can also offer tailored VitaLife products to suit your needs with the inclusion of natural solutions for the control of grass grub and porina.

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VitaLife Calcium

Calcium + Organic Matter + Beneficial Fungi

Calcium is the most important soil nutrient. It governs the uptake of other nutrients including the oxygen needed for healthy soil. Certain kinds of fungi help with the retention of calcium and its availability to the plant. **VitaLife** has researched and matched just the right fungi to do the job.

VitaLife Magnesium

Magnesium + Calcium + Organic Matter + Beneficial Fungi

The calcium/magnesium ratio in the soil largely determines the oxygen availability. More oxygen means more beneficial soil microbes as most are aerobic. **VitaLife Magnesium** provides natural forms of calcium and magnesium in the perfect ratio for consistent plant uptake. Increasing the levels of magnesium in clovers and grasses also helps to reduce calcium related metabolic disorders in lactating animals.

VitaLife Magnesium Plus

Magnesium + Calcium + Organic Matter + Beneficial Fungi + More Magnesium

At Fertilizer New Zealand we understand the importance of magnesium. For many years we have been supplying South Island farmers with our tried and true product VitaLife Magnesium. Now we're taking it to the next level by introducing VitaLife Magnesium Plus containing 32% magnesium, giving farmers even greater value for money. VitaLife Magnesium Plus will increase magnesium levels in clovers and grasses ensuring improved stock health. It is particularly effective in reducing the incidence of calcium/magnesium related metabolic disorders in lactating animals.



Magnesium Importance

- ✓ Magnesium is an extremely important element for all stock. It is defined as a macro element, which means it is required in large quantities. Magnesium is vital for a number of different functions in the body; including relaxation of muscles and nerves, utilisation of calcium and converting sugars to energy. Magnesium is not stored well as a reserve in the body, therefore stock need their daily requirement from feed intake.
- ✓ Under low magnesium uptake, hypomagnesaemia (or grass staggers) occurs which is most common at peak lactation. A heavily lactating animal requires three times as much magnesium as dry stock. Often with dairy cows you will not see the clinical signs of magnesium deficiency (muscle twitching, convulsions and death), but will suffer a drop in milk production and the cows will exhibit agitated or nervous behaviour.
- ✓ Most of the soils in New Zealand have adequate levels of magnesium. However, due to high levels of potassium and nitrogen in pasture and the lack of magnesium fertiliser inputs, magnesium deficiency in livestock is relatively common. With the increasing awareness throughout pastoral farmers of the importance of magnesium nutrition, VitaLife Magnesium has been developed. VitaLife Magnesium can supply two thirds of a dairy farm's magnesium requirement if applied at 400kg/ha. As part of a well balanced fertiliser programme VitaLife Magnesium can help in achieving optimum production from animals in optimum health.

Technical Notes

VitaLife Calcium

Mg	Ca
-	30

VitaLife Magnesium

Mg	Ca
11	18

VitaLife Magnesium Plus

Mg	Ca
32	10

Application Rates

The rate of application should be 250-750 kg/ha. Because the added microbes in VitaLife markedly increase the rate at which calcium and magnesium become plant available, the recommended rate should not be exceeded in any one application.