



Facial Eczema



The complete range of facial eczema supplements.



Animal Nutrition and Forage Advice that Works, Our Guarantee.



NUTRITECH
LEADERS IN ANIMAL NUTRITION

Managing Facial Eczema

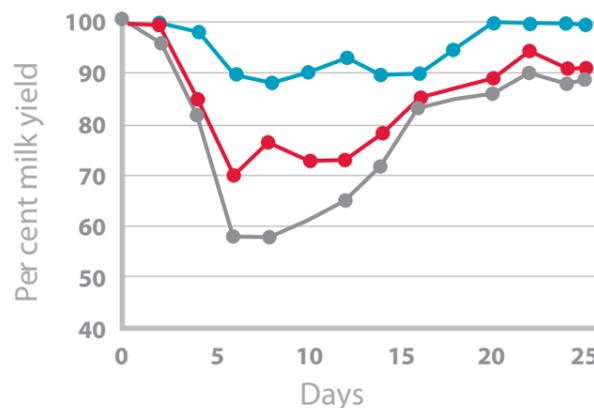
Significant Production Losses

Clinical cases are often only the tip of the iceberg. It has been estimated that for every cow with visible signs of facial eczema or elevated GGT levels, there are thirty sub-clinical cases, where liver damage is not detected and the cow is outwardly healthy. GGT is an enzyme released into the bloodstream from the damaged liver cells.

Trials conducted in the Waikato calculated the effect of low doses of Sporidesmin on milk yield. Over a three week period of grazing low levels of Sporidesmin, production across the herd had dropped by as much as 25%. These cows did not exhibit any detectable liver damage when tested for GGT levels.

Farmers often attribute production losses to something else resulting in productivity and income being adversely affected.

The effect of 3 low doses of Sporidesmin on milk yield. (Neale Towers, AgResearch)



Reducing the Impact of Facial Eczema

Prevention is the only recognised method of dealing with facial eczema, but no one method is totally effective. However, in combination with good management practices, the risk of facial eczema can be significantly reduced.

Planning

Control methods should be in place before pasture spore counts reach 30,000. Facial eczema risk summaries are available by region, with facial eczema pasture spore counts and cow liver damage levels (GGTs) monitored. However, facial eczema risk can vary greatly from herd to herd, and even from paddock to paddock, so it is important to be prepared and only use regional counts as a guide.

Pasture Management

- Hard graze paddocks to reduce amounts of rank, dead pasture material prior to the facial eczema season.
- Avoid topping paddocks in late Summer/Autumn, which increases the amount of dead leaf matter present.
- Monitor climatic conditions and on-farm spore counts so you know the risk. District trends are certainly useful but indicative only.
- Identify your highest risk areas and if possible avoid animals grazing them.

Animal Management

- **Zinc Sulphate Monohydrate:**
Concentrated product which contains 36% Elemental Zinc
Dose Rate: 5.5 g per 100 kg LW
(1.98 g Elemental Zinc per 5.5 g dose)
- **Zinc Sulphate Heptahydrate:**
Contains 22% Elemental Zinc
Dose Rate: 9 g per 100 kg LW
(1.98 g Elemental Zinc per 9 g dose)
- **Zinc Oxide:**
Contains 80% Elemental Zinc
Dose Rate: 2.5 g per 100 kg LW
(2 g Elemental Zinc per 2.5 g dose)

Zinc can be toxic if given at higher than recommended rates for the prevention of facial eczema and/or for prolonged periods of time. The copper, selenium and calcium status of animals should be assessed at the completion of zinc treatment.

If supplementing zinc sulphate via water, build levels up slowly to help adjust cows to the change in taste.

The Nutritech Range

AquaMin® Zinc



An all in one solution during the facial eczema period, containing elemental zinc whilst maintaining copper levels through the inclusion of organic (protected) copper. Also delivers cobalt and selenium, for improved rumen function and immunity.

Contains per 40 g dose: Cobalt 2 mg, copper‡ 150 mg, selenium 2 mg, sodium 3.6 g, zinc 10 g. ‡ Protected.

25 KG

AquaTrace® Copper Plus



Suitable for all year use, AquaTrace® Copper Plus provides a source of protected copper along other trace elements.

Contains per 5 g dose: Cobalt 10 mg, copper‡ 150 mg, iodine 9 mg, selenium 4 mg, zinc 300 mg. Flavour to promote intake.

‡ Entirely from an organic source.

25 KG

AquaZinc®



An all in one ready to use product designed as a convenient and effective solution to zinc dosing. AquaZinc® contains elemental zinc, protected copper and trace elements. Added molasses, kelp and flavouring encourage uptake of treated water.

Contains per 100 ml dose: Cobalt 2 mg, copper‡ 100 mg, selenium 2 mg, zinc 10 g. ‡ Entirely from an organic source.

200L

NutriMin® Silage Balancer Zinc



All in one mineral balancer to assist in the treatment of facial eczema and mineral deficiencies, suitable for feed out or mixer wagons.

Contains per 100 g dose: Calcium 19 g, cobalt 2 mg, copper‡ 150 mg, iodine 7 mg, magnesium 11 g, selenium 2 mg, sodium 5.8 g, zinc 10.3 g. ‡ Protected.

25 KG

NutriPlex® Copper



A liquid organic (amino acid chelate) source of supplemental copper. Organic minerals have a greatly increased availability to animals. NutriPlex® Copper is ideal for addition to water when dosing high levels of zinc sulphates or where antagonists such as iron, molybdenum and sulphur are present.

Contains per 1 ml dose: Copper‡ 87.5 mg. ‡ Entirely from an organic source.

20 L / 200 L

AquaTrace® Summer Mix



A concentrated, water soluble, trace mineral supplement for cattle containing organic copper. For use when dosing with zinc products such as zinc sulphate heptahydrate and zinc sulphate monohydrate.

Contains per 5 g or 10 ml dose: Cobalt 10 mg, copper‡ 150 mg, iodine 6 mg, selenium 3 mg. ‡ Entirely from an organic source.

25 KG / 20 L / 200 L

FloZinc™



FloZinc™ is a high zinc premix for use through power drenching systems at times of facial eczema risk, contains vitamins and trace elements including NutriPlex® Copper to maintain liver copper levels.

Contains per 20 g dose: Calcium 2 g, cobalt 2 mg, copper‡ 150 mg, iodine 7 mg, selenium 2 mg, vitamin E 40 iu and zinc 10 g. ‡ Entirely from an organic source.

25 KG

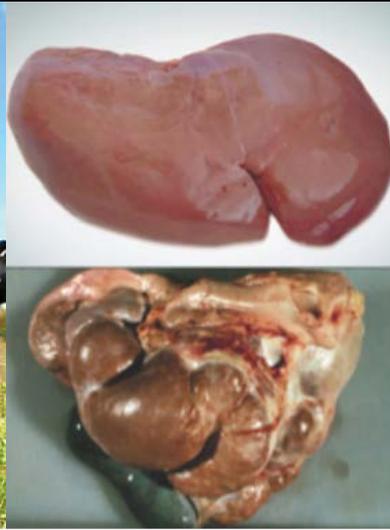
AquaTrace® Summer Mix + Molasses



Provides an ideal combination of energy and trace minerals to help sustain optimal production and animal health over the facial eczema period. Provides copper in its protected form to help maintain and improve copper status.

Contains per 1 kg dose: Cobalt 10 mg, copper‡ 150 mg, iodine 6 mg, selenium 3 mg. ‡ Entirely from an organic source.

BULK



What is Facial Eczema?

Facial eczema occurs mainly in the northern half of New Zealand, where the fungus, *Pithomyces chartarum* grows on dead and dying pasture in late Summer and Autumn. It produces a toxin, Sporidesmin, which cows eat when grazing pastures high in fungal spores.

The effects of eating Sporidesmin are not seen immediately, there is generally a lag of 7-10 days between ingestion of the toxin and appearance of clinical signs. Clinical cases of facial eczema are well recognised, looking like severe sunburn (photosensitisation), affecting the animals' back, udder and face.

A healthy liver processes waste products from the breakdown of chlorophyll (phylloeythrin) and excretes them from the body. Sporidesmin attacks the liver so that waste products and free radicals build up and accumulate in tissues and under the skin, causing photosensitisation. GGT levels indicates the extent of liver damage.

Middle image compares a healthy liver (top) to one affected by facial eczema (bottom).

Right image compares a healthy liver cross section (top) to one affected by facial eczema (bottom).

Quality is Assured

To address the issue of residues in trace minerals that are of major concern to feed and food safety, Nutritech adheres to a strict code of quality assurance. Nutritech ensures its products are manufactured to the highest standards, to ensure product integrity and traceability. Our raw materials are sourced globally. All raw materials are supplied with a certificate of analysis confirming mineral content and screening results for undesirable substances, in particular heavy metals, dioxins and dioxin like PCBs. Independent local testing is regularly conducted to confirm product specifications, providing a robust process to confirm the integrity of all raw materials and products. Nutritech operates under the ISO 9001 Quality Assurance and GMP guidelines.



Call Customer Services
0800 REMEDY (736 339)

www.nutritech.co.nz



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