

# BIOTIN

Trials  
show

IMPROVED  
HOOF  
HEALTH

ENHANCED  
DIGESTION

INCREASE  
MILK  
PRODUCTION

KEY BENEFITS

## Biotin – Vitamin H

### Improved hoof health & milk production in dairy cows

Biotin, a water-soluble B-vitamin – commonly referred to as vitamin H – is an essential nutrient for both rumen bacteria and the dairy cow. Biotin is fundamental in the formation and maintenance of healthy keratinized tissues, namely skin, hooves, hair coat & foot pads. The primary role of keratin proteins is to make the skin, hair & horn pliable and insoluble protective barriers against the natural environment. Hoof horn formation requires biotin for the production of this keratin (structural proteins) and for the production of the “cement” that bonds together hoof horn cells to form a semi-waterproof barrier to the environment.

Rumen synthesis of biotin has been estimated at 0-4mg/day and net biotin absorption calculated to be 3-5mg/day. In previous studies, biotin uptake ranged between 0.5 – 2mg per day in steers.



#### HOOF HEALTH

Symptoms of biotin deficiency include: hoof disorders in the form of laminitis, heel horn erosion, lesions, sole ulcer, white line disease to name but a few, result in lameness (10-14% of NZ herds) being a major health concern of the dairy industry, leading to economic losses etc. Research studies have shown when dairy & beef cows are fed 10-20mg/day supplemental biotin, there are significant reductions (30-62%) in the incidence of hoof lesions and lameness.

#### DOSAGE METHODS



Drench gun



Trough



Mixer wagon



Dosing pump



#### DAILY DOSE RATE

normal dose	0.5g/cow/day (supplies 10 mg/day)
high dose	1g/cow/day (supplies 20mg/day)

**To achieve hoof hardness it is essential to supplement Biotin for a minimum of six months**

“ We have used biotin for hoof health for 2 years... This has substantially reduced our white line foot faults... I can testify that the longer you are on this product the more improved the result will be. Kevin Davidson – 1400 cows ”