

BIMEDA'S UNIQUE VET-ONLY

# VITAMIN B1



A SPECIALISED THIAMINE  
PRODUCT YOU CAN RELY ON

## BENEFITS

- ✓ Has the **highest concentration** of B1 per ml of any product available in the market: At 100mg/ml it has **more than twice** the thiamine of any product on the market
- ✓ Is the **only specialised** Thiamine product on the market
- ✓ Is licensed for both intramuscular and intravenous administration
- ✓ Is the only intravenous B1 specialised product available on the market
- ✓ Suitable for treatment of CCN
- ✓ Suitable for adjunctive treatment of metabolic disorders of cattle.
- ✓ Zero milk and meat withdrawals
- ✓ Safe for lactating and pregnant animals

# Looking for an effective treatment for thiamine deficiency in calves and cattle? Look no further than Bimeda's innovative vet-only Vitamin B1 product

## **What Is Vitamin B1?**

Vitamin B1, also known as thiamine is a water soluble vitamin. Thiamine is converted to aneurine pyrophosphate (cocarboxylate) which is critical in carbohydrate build-up or breakdown. When carbohydrates are a major source of energy the body requirements of thiamine increase.

## **Thiamine In The Ruminant**

Thiamine (Vit B1) is normally synthesized in sufficient quantities in the rumen of cattle and sheep on well balanced roughage diets. Also cereals contain adequate amounts so most animals have adequate levels of thiamine.

## **Thiamine Deficiency**

Tissues such as the brain and heart are particularly compromised in thiamine deficiency. Thiamine deficiency may be primary, due to deficiency in the diet, or secondary, because of destruction of the vitamin in the diet by thiaminase.

## **CCN**

Cerebro Cortical Necrosis or Thiamine Inadequacy Polioencephalomalacia is one of the most common manifestations of thiamine deficiency in ruminants and is an important neurological disease of ruminants

## **The Causes Of CNN**

The principal cause of thiamine deficiency is thiamine inadequacy. The presence of thiamine-destroying agents called Thiaminases which are widely distributed in nature, and produced by rumen microflora and bacteria such as certain clostridium and bacillus species can cause a reduction in thiamine levels for absorption.

Sudden change in diets, high concentrate feeding, heavily sulphur-fertilised pastures, as well as copper and cobalt deficiencies have all been observed to be predisposing factors to CCN.



CCN is a relatively common nervous disease in young cattle, sheep and goats and typically characterised by various signs of brain damage. It usually occurs in individual animals but can occur in outbreaks. Acute cerebral oedema and laminar necrosis are the typical lesions seen and treatment must be rapid to ensure complete recovery from the episode

Calves at 4-9 months of age are mostly affected but occasionally the disease is diagnosed in adult cattle.

### **Identifying CCN**

In the early stages calves will:

- show poor appetite,
- staggy gaits,
- often separate from other calves
- walk with their heads erect
- 'Star Gaze' and appear blind

### **Untreated Cases**

Untreated cases can progress to complete blindness with head pressing, recumbancy, muscle tremors, progressing to convulsion and death within 2-3 days. .

### **Treatment**

Treatment requires repeated injections of Vitamin B1 administered 2-3 times daily for three days. Recovery may be slow in animals treated in the later stages of the disease.

### **Metabolic Diseases**

It is useful to note that thiamine can also be effectively used as supportive treatment of the metabolic disorders such as rumen acidosis and ketosis in cattle (Harmeyer and Kollenkirchen, 1989).

**For further information:****UK**

Contact your local Bimeda Sales Rep, or Bimeda UK Sales  
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**Ireland**

Contact Bimeda Ireland Sales Office on 1850 51 52 53

BIMEDA'S UNIQUE VET-ONLY

**VITAMIN B1**

(thiamine hydrochloride ph. eur. 100 mg/mL)

**Indications:** For the treatment of cerebrocortical necrosis in cattle and sheep  
and as an adjunct in metabolic disorders of cattle.

**Withdrawal Period Milk:** Nil

**Withdrawal Period Meat:** Nil

List No.	Unit Package
1VIT003	50ml

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