

# KRYPTADE®

- KRYPTADE is an isotonic electrolyte formulation designed for fast, gentle re-hydration of calves with scours.
- KRYPTADE aids the recovery of calves scouring from cryptosporidiosis (crypto).
- KRYPTADE contains the anti-crypto-oocyst active ingredient beta-cyclodextrin (also a prebiotic carbohydrate), amino-acids, and seaweed extract, in combination with ENERVADE electrolytes with prebiotic, soluble dietary fibre carbohydrate.

## The Benefits of KRYPTADE

New Zealand trials have shown crypto scouring calves

- Return to milk appetite faster; onto **milk diet over 24 hours earlier**
- Reduced in total electrolyte used - 40% lower.
- Calves will be noticeably brighter, earlier after treatment with KRYPTADE.
- Time to full recovery is reduced from 7 - 8 days down to 3 - 4 days with crypto scours.
- KRYPTADE is an ideal electrolyte for either transit, infectious or nutritional scours where there is a risk of exposure to cryptosporidial infection.

**Available only from veterinarians**

**KRYPTADE Pack Sizes:**

**Sachets (80g dose), 5 kg & 15 kg Buckets**

**No withholding period**

**No prescription required** 0716

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KRYPTADE, ENERVADE and EXAGEN are registered pursuant to the ACVM Act 1997, No A9621, A9410 & A9536. See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz)

# EXAGEN®

EXAGEN is a powder formulation for use as an in-feed (milk or milk replacers) supplement for calves from birth for 10 days, or at any stage when they are at risk of crypto scours due to exposure of crypto infection. **Feed twice daily at 12.5g per dose.**

Safe to use for calves being fed in cafeteria. Wide safety margin, with weights of each calf not essential prior to dosing.

Beta-cyclodextrin knocks out oocysts re-cycling and re-infecting the intestinal lining.

## The Benefits of EXAGEN

- Reduced risk of cryptosporidial scours developing.
- Reduced environmental contamination.
- Continue to have an appetite for milk feeding.
- Reduced period of treatment.
- Reduced total amount of electrolytes for treatment.
- Calves will respond to isotonic electrolyte treatment.
- Faster recovery, being brighter and more alert earlier.
- Reduced labour in calf unit
- Reduced hospitalised calves.



**Available only from veterinarians**

**EXAGEN Pack**

**5kg Bucket**

**20 kg Bag**

**FreePhone: 0800 844 466**

**E-mail: [lifestart@pvd.co.nz](mailto:lifestart@pvd.co.nz)**

**PROFESSIONAL VETERINARY DISTRIBUTORS LIMITED**

**289 Titirangi Rd.**

**P O Box 60 227. TITIRANGI 0642.**

**AUCKLAND. NEW ZEALAND**

**PROFESSIONAL VETERINARY DISTRIBUTORS LIMITED**

# The Crypto Control Programme

**New Zealand First**

**The radical new way of managing Crypto scours in New Zealand calf units**

**Full details: The Crypto Control Programme**

**[www.pvd.co.nz](http://www.pvd.co.nz)**



Based on the revolutionary breakthrough solution of KRYPTADE electrolyte for treatment and EXAGEN in-feed prevention for calves at risk of cryptosporidial scours.

The first and only products in New Zealand that effectively targets the cryptosporidial oocyst in the gut — safely

- Reducing the severity of infection
- Reducing the risk of new infections of crypto scours

# The Crypto Control Programme

Infectious scours is usually identified after scour samples are taken to your veterinarian. The colour, texture, smell or look of a scour is meaningless in identifying the infectious agents present. Crypto is one of the most common findings from these samples. Though it is possible that other infectious agents may also be present.

Because crypto causes extended periods of scouring it is depressing for calf rearers to deal with. Calves require repeated electrolytes until their appetite returns. This scouring period may extend for 5 – 9 days, with appetite for milk only slowly recovering and frequently absent for much of this time.

The loss of appetite in calves with infectious scours is associated with gastric discomfort. This discomfort directly inhibits the appetite centre in the brain. Until this discomfort disappears or is removed calves will not voluntarily drink milk. And forcing milk (tubing) only adds to gastric discomfort extending the recovery period further.

## Overnight Management:

For additional improvement to rehydration of scouring calves it is recommended that an isotonic electrolyte e.g. **ENERVADE** is available ad lib (freely available) to all calves overnight. Ensure fresh water is also available.

## Nutritional Benefits of Beta-cyclodextrin

- Beta-cyclodextrin is a carbohydrate. It therefore has a wide safety margin. Always read and follow the instructions before use.
- It is non-accumulative and acts only in the intestine.
- It is degraded in the lower intestine by fermentation by very specific bacteria.
- Fermentation ensures energy is available for uptake of fluids from the large intestine. This aids rehydration efforts.
- Beta-cyclodextrin acts as a prebiotic—providing additional health benefits.

## Knocking out the oocyst

This saves calves from severe and extended periods of infection.

## A Real Solution for Crypto

The answer is to reduce the infection and the re-infection of the intestine by the crypto oocysts (the infective stage), by knocking them out with beta-cyclodextrin. Beta-cyclodextrin is present in **KRYPTADE** which is formulated specifically to be gentle to the gut lining encouraging early recovery of milk appetite.

Beta-cyclodextrin is also present in **EXAGEN** to target crypto oocysts before they get well established. It's designed for calves known to be at high risk where preventative steps are required. Since calves are at highest risk in the first 3 weeks of life, treatment for prevention can be concentrated into the first 14 days of a calf's life. There is residual carry-over of its benefits for 4 – 5 days after EXAGEN is stopped. Beta-cyclodextrin has been found to attack the oocyst and reduce their infectivity within 15 – 30 minutes of contact. So dosing done every 12 hours initially markedly reduces oocyst output. This loss of re-infection reduces the gut inflammation. This starts an immediate return to the recovery earlier than in untreated calves. EXAGEN is simply added to the milk or milk replacer. Safe to use, there are no risks of over-dosage.

## Conclusions:

### General - Returning Scouring Calves to Milk

Offer milk gently to affected calves after 24 hours to test their appetite. Separate out the recovering calf into a feeding group where the volume can be managed carefully.

Those calves receiving milk in recovery must have reduced and controlled amounts of milk. Several small meals - 25% - 33% of normal volumes are recommended. This is aimed to keep them drinking by avoiding discomfort. There is also the risk of rebound scours from excessive intake with too much volume to a gut that is unable to handle the digestive processes (i.e. aim to avoid a nutritional scour).

## Actions

### Stage One: Diagnosis

To identify crypto take at least 4 samples of freshly scouring calves to your veterinarian. While you are waiting for a diagnosis, start electrolyte treatment with **Kryptade** until you have a confirmed diagnosis. This will provide you with the most cost effective treatment especially if cryptosporidiosis is involved.

### Stage Two: Treatment

Start all calves which have scours on **KRYPTADE**. Dose according to label. Give 2 doses within 6 -8 hours, and follow with 12 hourly until appetite returns. Farmers find appetite returning for over 60% of calves at 24 hours, with calves noticeably brighter at the end of the first day. However where high energy electrolytes are used to treat these calves, a further delay of 24 hours is experienced.

Always care for the hospital mob after the healthy calves. Wash footwear to get rid of any contaminating scour material that may be transferred between healthy and hospital mobs. Especially wash footwear on leaving the hospital/sick group. Consider drainage from this cleaning is not making the problem worse.

### Stage Three: Prevention

**Commence dosing all calves younger than 10 days of age with EXAGEN. At the same time, start dosing all calves just arriving into the calf unit. They are at high risk of developing infection irrespective of any precautions that may be taken. Oocysts are produced within 36 hours of the first infection. High levels of oocysts can be produced before any scouring starts. Remember that beta-cyclodextrin will substantially lower the number of oocysts excreted as well as the number of calves excreting oocysts.**

### Stage Four: Planning for next year.

- Cleaning and Hygiene
- Shed management - bedding
- Calving down
- Buying in Calves – Blood GGT to show colostrum protection
- Colostrum