

## **Product Description**

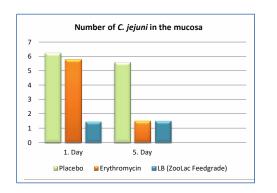
Zoolac Feedgrade is a combination product produced by the fermentation of a growth media (sugars, etc.) by means of a special strain of Lactobacillus acidophilus.

After fermentation, the pH is adjusted and the product heated to 140°C and then freezedried

Zoolac Feedgrade therefore contains: Lactic acid, lactic acid salt and thermostabilized lactic acid bacteria.

### **Protective film**

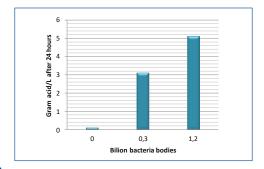
The thermo stabilized bacterial elements from ZooLac Feedgrade attach to the mucous membranes and form a physical barrier which prevents the harmful bacteria from becoming attached. Thus avoiding the harmful effect.



## Impact on harmful bacteria

In a study with Campylobacter infection in mice, ZooLac Feedgrade indicates just as good effect as antibiotics, but with full effect within one day, where it took 5 days with the antibiotic.

The impact of ZooLac Feedgrade on allready established infection with Campylobacter unit.



### Stimulation of the intestinal flora

The acid production in the intestine is a direct manifestation of growth in the acidproducing part of the intestinal flora – which is the "good" part.

It can be seen then that the stimulation of the intestinal flora is high and dosedependent.

# 140 120 100 80 60 40 20 17 0 Before Control LB (ZooLac Feedgrade) Lysates

ZooLac Feedgrade's immunostimulatory effect in relation to different pathogenic microorganisms.

# Stimulation of the immune system

It appears that the stimulation of the local immune system in the intestine is on a par with the reaction resulting from an infection with a pathogenic concentration of harmful bacteria.

### Mode of action

Feedgrade has three essential mode of actions:

- Formation of a PROTECTIVE FILM of thermostabilized bacterial elements on the mucous membranesof the gastrointestinal system.
- Stimulation of the "good" part of the natural intestinal flora for strong growth.
- Stimulation of the immune system in the intestines.



# The ZooLac effect on pigs

**Benefits from ZooLac:** 

•0,5 kg ZooLac Feedgrade per ton of finished feed.



- 0,5 kg ZooLac Feedgrade per ton of finished feed for the last 2 weeks before faring, or:
- 1 kg ZooLac Feedgrade per ton of finished feed for the last week before faring.

- •1 kg ZooLac Feedgrade per ton of finished feed for the first 2 weeks in weaning unit
- 0,5 kg ZooLac Feedgrade per ton of finished feed in the last week in the weaning unit.

Weaning unit

Farrowing unit

•50 g Zoolac Plus in 500 liter of water or milk. 1 kg ZooLac Feedgrade per ton of finished feed.



# The ZooLac effect on pigs

**Benefits from ZooLac:** 



- Less antibiotics
- · Less diarrhoea
- Better feed conversion
- Stimulates the immune system
- •Less diarrhoea in piglets

Less antibiotics

Less antibiotics

•Less diarrhoea

 Better daily gain Better feed conversion

- Less diarrhoea
- Fewer runts
- Better daily gain
- Better feed conversion

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