

# A better digestive adaptation to feed



Postbiotic product obtained from the fermentation of a culture of microorganisms, transformed during the manufacturing process itself

compliant with regulation UE/2017/1017 P.28

# Healthier animals. Effective alternative to coccidiostatics Co-funded by the Horizon 2020 programme of the European Union The EU Framework Programme for Research and Innovation



### What is POSBIOTEK Ruminants?

POSTBIOTEK Ruminants is a Postbiotic. Its activity lies in the METABOLITES produced by the fermentation of a selection of lactic bacteria and yeasts during our production system, which include:

- Enzymes: amylase, protease, lipase and cellulase.
- Volatile organic acids.
- B-complex vitamins.
- Antiinflammatory molecules.
- Molecules that modulate the innate immune system.

# Advantages of POSTBIOTEK Ruminants

- Enhances the establishment of an adult microbiota during the feed change period
- Anticoccidiostatic activity as an alternative to current prescription treatments
- Reduction of antibiotic application.
- Increases by >30% the production of immunoglobulin A in respiratory mucosa, when used from birth (see table 1).
- Favours the early establishment of an adult microbiota.
- Lowers the cellular inflammatory response (see table 2).

Table 1.A IqA Levels in nasal mucosa Table 1.B IgA against syncytial virus in nasal mucosa а 4.5 6 BRSV-lgA, log2 4.0 gA, mg/mL 5 3.5 3.0 2.5 **INCREASES BY >30%** 2.0 3 THE PRODUCTION OF Control **POSTBIOTEK** Control POSTBIOTEK **IMMUNOGLOBULIN A** Table 2. Cellular inflammatory response against E. Coli y salmonella BETTER а 5000 INFLAMMATORY b IL-1 beta, pg/mL 4000 **RESPONSE** 3000 b 2000 1000 Control POSTBIOTEK 0 E-0.01 E-5 S-0.01 S-5

# **Production guarantee**

a, b indicates the difference in P < 0.05

POSTBIOTEK RUMINANTS is produced with registered strains of lactic bacteria and yeast deposited in the Spanish Standard Culture Collection (CECT), in combination with olive pomace flour.

Data source: South Dakota State University (Dep. Of Dairy and Food Science)

Raw materials used are of NON-GMO vegetal origin and products are authorised in accordance with the highest production standards.



## POSTBIOTEK RUMINANTS - FEED CHANGE

### When to apply and dose to administer

To apply during the transit of weaning to the first feed for at least 30 days, it contributes to the reduction of dietary disorders and starts more quickly in feed. It is previously recommended to use PROBISAN RUMINANTS M during the first lactation phase, mixed with powdered milk.

Ruminants are subjected from birth to multiple causes of stress that include transport at very early ages to accommodation with high concentrations of pathogenic microorganisms, changes in milk consumption to solid, etc. These circumstances predispose animals to suffer digestive disorders mainly due to coccidiosis problems against which the product is highly effective.

Lactating calves	10 grs / animal and day in two shots 10 days
	5 grs / animal and day the next 20 days
Lactating lamb/kid	6 grs / animal and day in two shots 10 days
	3 grs / animal and day the next 20 days

### Composition

Wheat bran, alfalfa flour, and olive pomace flour.

Crude protein	. 19.64 %
Crude fibre	. 11.90 %
Crude oils and fats	. 4.60 %
Crude ash	. 5.82 %
Lysine	. 0.82 %
Sodium	. 0.20 %
Methionine	. 0.29 %
Calcium	. 0.27 %
Phosphorous	. 0.70 %



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