



PROBISAN RUMINANTS-FATTENING

The stimulation of natural immunity



Post-biotic 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.
Enhances the productive conversion



Co-funded by the Horizon 2020 programme
of the European Union

The EU Framework Programme for Research and Innovation



What is PROBISAN Ruminants-Fattening?

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

- **Enzymes:** amylase, protease, lipase and cellulase
- **Volatile organic acids.**
- **B-complex vitamins.**
- **Antiinflammatory molecules.**
- **Modulating molecules of the innate immune system.**

Advantages of PROBISAN Ruminants-Fattening

Using PROBISAN Ruminants in ruminants' feed:

- **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** to infection by E. coli and salmonella (see table 2).
- **Increases the intestinal absorption surface area:** 12-15%
- **Improves the integrity of the intestine:** tight-junction.

Table 1.A IgA levels in nasal mucosa

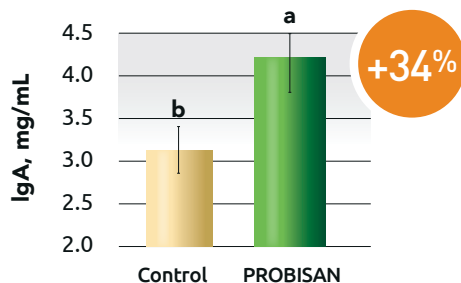
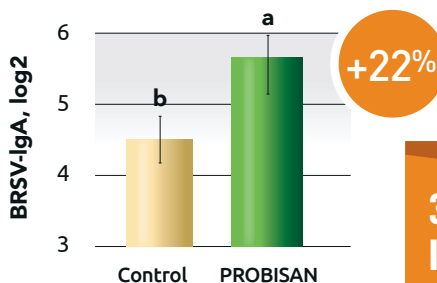
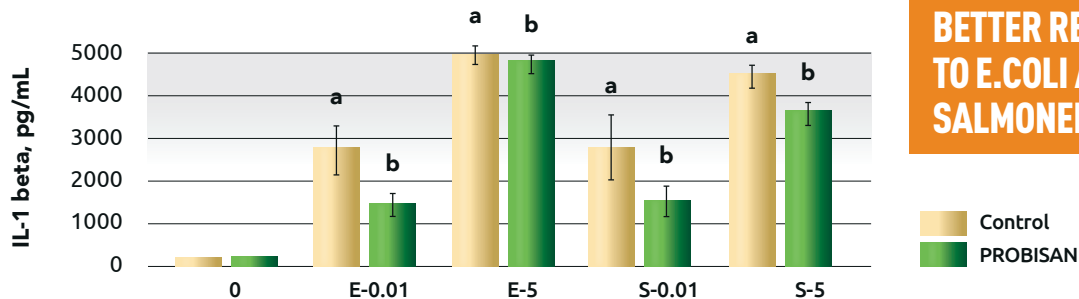


Table 1.B IgA compared to syncytial virus in nasal mucosa



**30% INCREASE
IN PRODUCTION OF
IMMUNOGLOBULIN-A**

Table 2 Inflammatory response to E.coli and salmonella infections



**BETTER RESPONSE
TO E.COLI AND
SALMONELLA**

a,b indicates the difference in $P < 0.05$

Source: South Dakota State University (Dep. of Dairy and Food Science)

Production guarantee

PROBISAN RUMINANTS is produced with registered strains of lactic bacteria and yeast deposited in the Spanish Standard Culture Collection (CECT).

Raw materials of NON-GMO origin and products authorised in accordance with the highest production standards are used in their production. Our production installations and processes are certified by GMP+.





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When to apply and dose to administer

From birth, ruminants are subject to multiple causes of stress that include being transported at very early ages towards accommodation with high concentrations of pathogens, changes from milk to solid consumption, etc. These circumstances predispose the animals to suffering from digestive and respiratory diseases.

The administration of the product establishes the rumen conditions, increases the mucosa immunity and increases the intestine's absorption capacity and thereby the animal is sick less often, is able to obtain greater daily growths and better conversion rates.

Calves	Colostrum	3 g/animal, on the first take
	Reconstituted milk	3 g / animal / day
	Starter feeds	5 g / animal / day
	Fattening feeds	1 kg/Tm of complete feed
Lambs and goats	Colostrum	3 g/animal, on the first take
	Reconstituted milk	3 g / animal / day
	Starter feeds	5 g / animal / day
	Fattening feeds	1 kg/Tm of complete feed

For the colostrum and reconstituted milk phases we recommend using MICRONIZED PROBISAN RUMINANTS for better mixing with powdered milk and/or water

Composition

Wheat bran, alfalfa flour, non-bitter yeast.

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 %



Pentabiol S.L

Pol. Ind. Noáin Esquíroz
Calle S/Nave-4
31191 Navarra (SPAIN)
Tel. +34 948 312 028
mail: info@pentabiol.es
www.pentabiol.es