



We create chemistry

BalanGut™ LS

The right balance for
a healthy gut and
sustainable wellbeing



The unique mixture of naturally occurring monoglycerides
of short and medium chain fatty acids.

- Supports microbiome balance
- Improves gut integrity
- Supports animal health

The science of sustainable feed that succeeds

BalanGut™ LS. The way it works

Balangut contains butyric, caprylic and capric acid monoglycerides, which have active impacts on the gut, resulting in:

- Cell proliferation and epithelium renewal
- Positive effects on tight junctions
- Promotion of peptide secretion
- A balanced enteric microbial population

Interacting
with bacteria

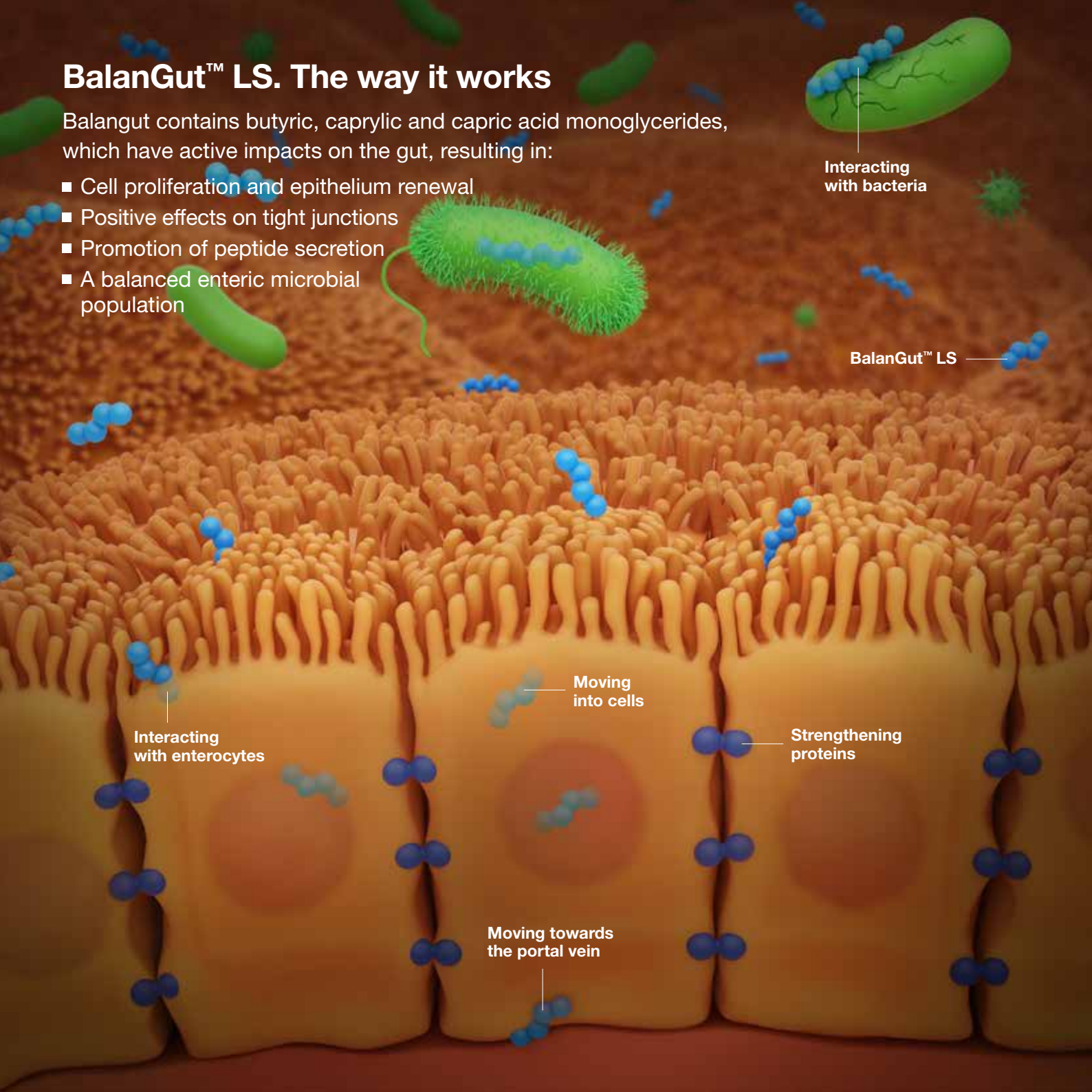
BalanGut™ LS

Interacting
with enterocytes

Moving
into cells

Strengthening
proteins

Moving towards
the portal vein



Trial results demonstrate BalanGut™ LS's ability to balance health and performance

Table 1. MIC assay comparison of blend of short and medium chain fatty acid glycerides versus simple salts of butyric acid

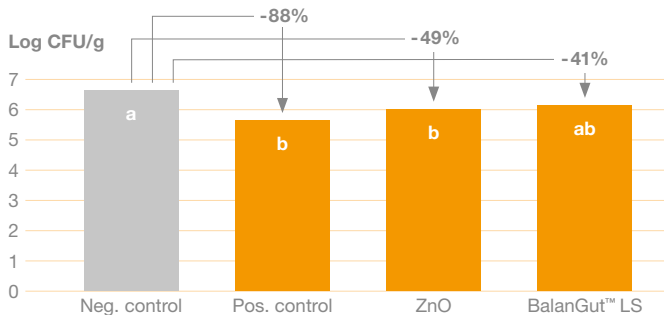
Tested product	pH	<i>S. typhimurium</i>	<i>C. perfringens</i>	<i>E. coli</i>	<i>Lactobacillus spp.</i>
Monoglyceride blend	4.5	0.06%	0.01%	0.12%	No inhibition
Monoglyceride blend	7	0.06%	0.01%	0.12%	No inhibition
Sodium butyrate	6	2.8%	3.0%	2.9%	n.d.

Source: G. Tosi, L. Alborali. WPSA-48th National Congress of the Scientific Association of Aviculture, April 2011.

In vivo data.

Piglet trial in Spain (IRTA). Weaned piglets challenged with a pathogenic strain of *E. coli* (K88).

Fecal shedding of *E. coli* (average 0-14 exp. days)



Negative control group: Challenged with *E. coli*
No feed additive in diet

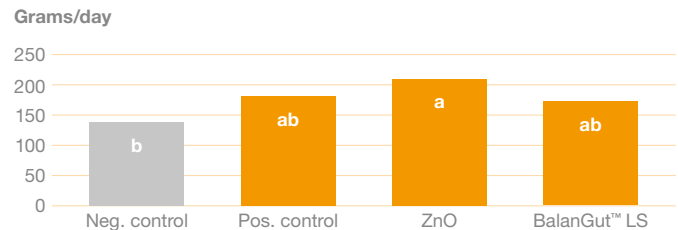
Positive control group: Challenged with *E. coli*
feed supplemented with Colistin 80 ppm

Zinc oxide group: Challenged with *E. coli*
feed supplemented with ZnO 2500ppm

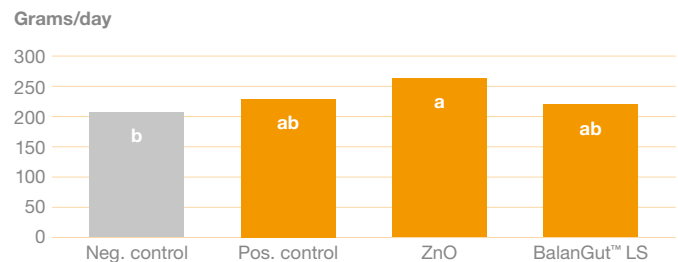
BalanGut™ LS group: Challenged with *E. coli*
supplemented with BalanGut™ LS 3000ppm

ab superscripts mean that values are statistically different (P<0.05; Tukey adjustment)

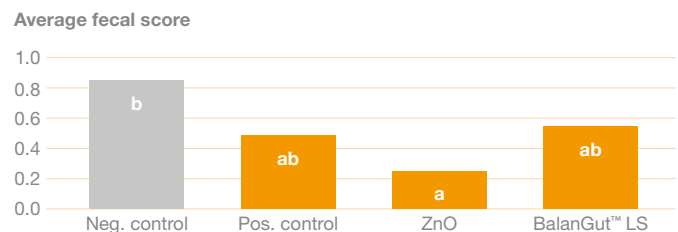
Body weight gain (day 0-21) (17d PI)



Feed intake (day 0-21) (17d PI)



Fecal scores (day 21) (17d PI)



A healthy gut is the key to a healthy animal

Far more than being just a digestive organ, the gut is key to every aspect of animal health, wellbeing and performance. BalanGut™ LS is proven to play a vital role in this, restoring gut integrity, supporting beneficial bacteria, the animal's own immune defence system, without excessive use of antibiotics. So it can help you create feed that delivers for the animals, your business and your customers, while meeting the demands of the market and consumers. Sustainable feed that succeeds.



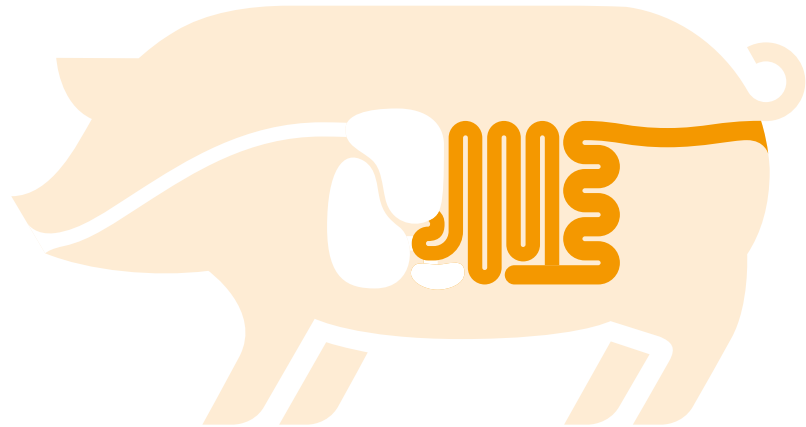
Fortifying intestinal health and supporting animal wellbeing

The unique mixture of naturally occurring monoglycerides of short and medium chain fatty acids in BalanGut™ LS supports:

- Restoration and strengthening of intestinal health
- Intestinal health resilience
- Improved livability
- Animal wellbeing
- Economic and ecological sustainability

BalanGut™ LS is a sustainable solution that fosters gut balance and good health of the animal.

Where it works



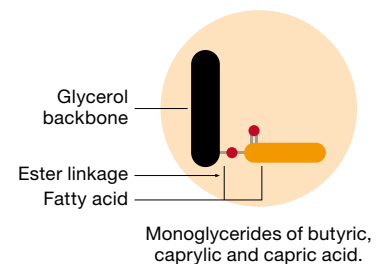
BalanGut™ LS's main active ingredients of monoglycerides of butyric, caprylic and capric acids are delivered via feed and are active throughout the small and large intestine.

Extra protection and ease of handling

The presence of ester bonds ensures:

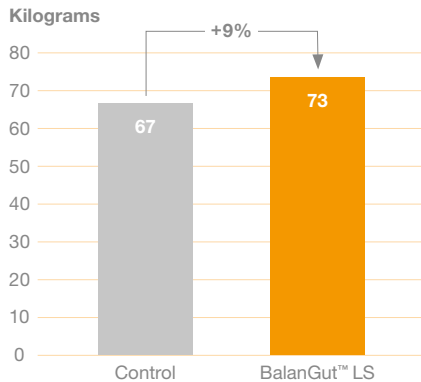
- Non-corrosivity
- Heat stability
- Non-volatility
- Non-pungent smell
- A pH-independent action in the gut

Monoglyceride

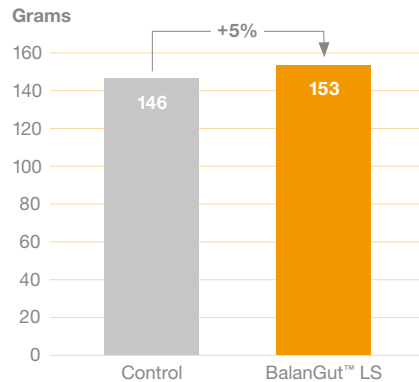


Results show BalanGut™ LS's positive impacts on suckling piglets

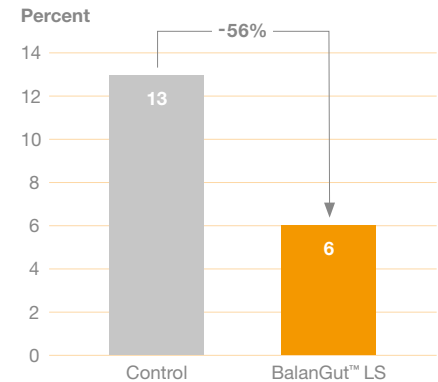
Litter weight gain (birth to weaning)



Daily feed intake (creep feed)/litter (day 8 to to weaning)



Weaning losses (birth to weaning)

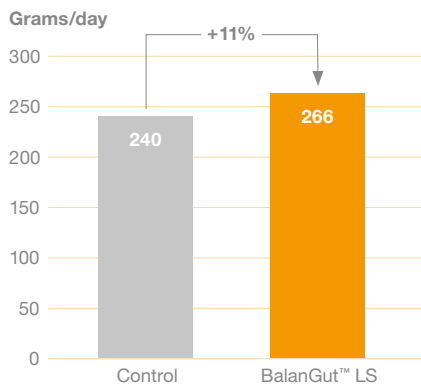


Trial 2a. Suckling piglets raised under commercial conditions in Denmark

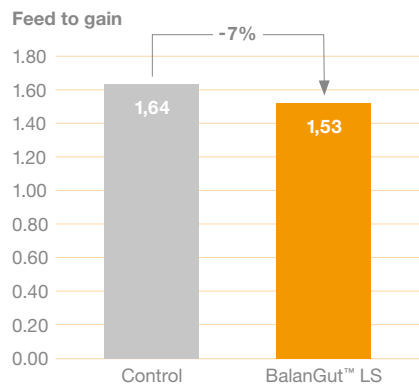
Suckling piglets raised under commercial conditions; control group was fed a standard diet with no antibiotics nor feed additives; the BalanGut™ LS group was fed BalanGut™ LS at 5kg/ton of creep feed.

Trials also indicate very positive impacts on weaned piglets

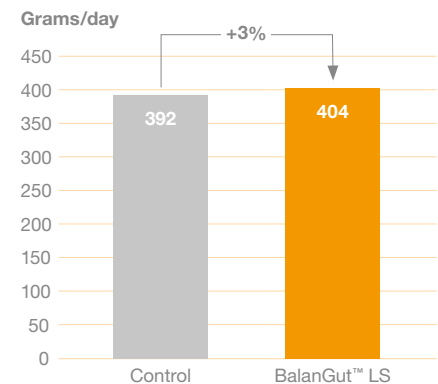
Body weight gain (d25 to d60 post weaning period)



FCR (d25 to d60 post weaning period)



Feed intake (d25 to d60 post weaning period)



Trial 2b. Weaned piglets (@day 25) raised under commercial conditions in Denmark

Weaned piglets at day 25 were raised under commercial conditions and divided in two groups: control group was fed a basal diet with no antibiotics and the BalanGut™ LS group was fed BalanGut™ LS at 3kg/ton of feed in the pre-starter diet and 1.5kg/ton in the starter diet.

Choose the BalanGut™ LS formulations that are right for you

Product name	Form	Application	Packaging	Article number
BalanGut™ LS P	Powder	Livestock Pigs, Poultry	25 Kg Paper bag 650 Kg Big bag	50624860 50624881
BalanGut™ LS L	Liquid	Livestock Pigs, Poultry	20 Kg Jerry can 1000 Kg IBC	50624857 50624858

Also available for aquaculture

BalanGut™ AQ P	Powder	Aquaculture Fish, Shrimp	25 Kg Paper bag 650 Kg Big bag	50625849 50625855
BalanGut™ AQ L	Liquid	Aquaculture Fish, Shrimp	20 Kg Jerry can 1000 Kg IBC	50624702 50624706

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