



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
- Promotes health and vitality

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

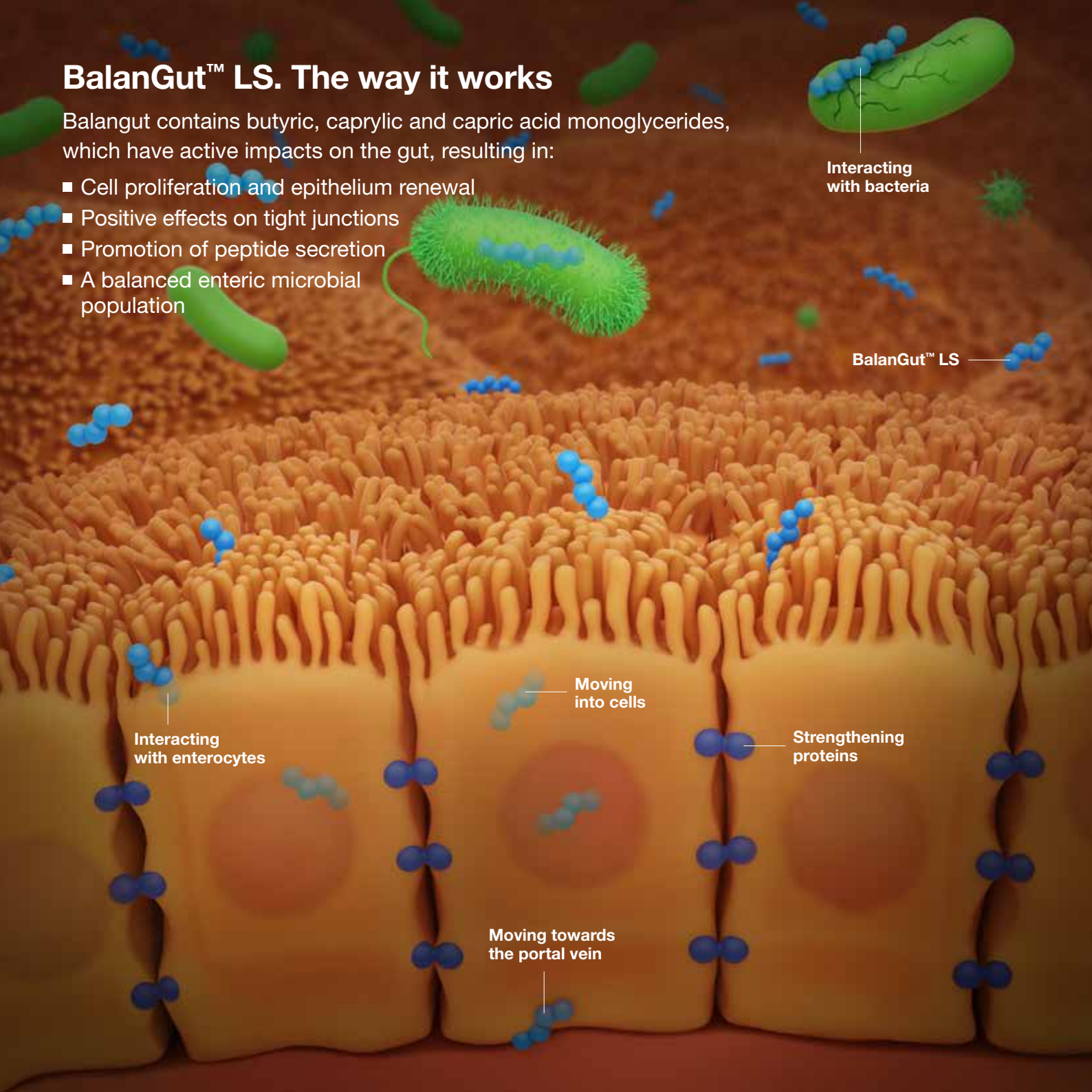
BalanGut™ LS

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.

Trial 1. German broilers challenged with a pathogenic strain of *C. perfringens*.

NE model was as follows:

Day 4 & 9: IBD vaccination

Day 14 & 16: Coccidia-Vaccination with Hipracox and Paracox-8 (10-fold of recommended dose)

Day 18, 19, 20: Oral challenge with *Clostridia perfringens** (*virulent isolate)

Treatment group as follows:

No challenge group: No Challenge No feed additive added to the diet

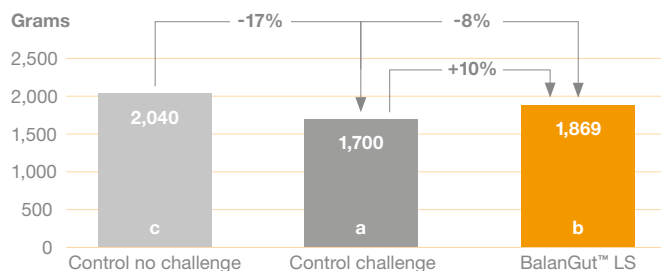
Challenge no treatment group: Challenged with *C. perfringens* no feed additive in diet

BalanGut™ LS group: Challenged with *C. perfringens* supplemented with BalanGut™ LS 3kg/MT feed

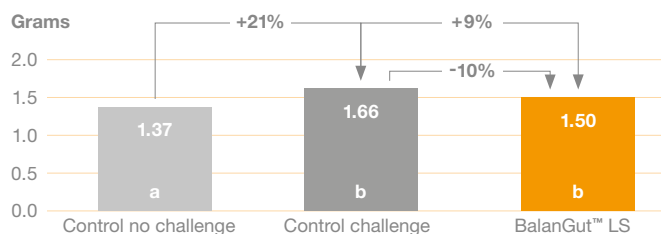
BalanGut™ LS can ameliorate the negative impact of a strong NE challenge.

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

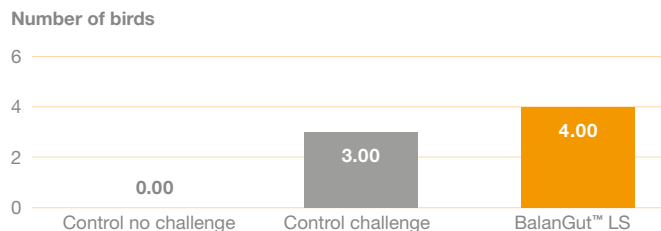
Body weight (day 36)



FCR (day 16 - 36)



Mortality (number of birds 16 - 36)



A healthy gut is the key to a healthy bird

Far more than being just a digestive organ, the gut is key to every aspect of birds' health, wellbeing and performance. BalanGut™ LS is proven to play a vital role in this, restoring gut integrity, supporting beneficial bacteria, the bird'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.



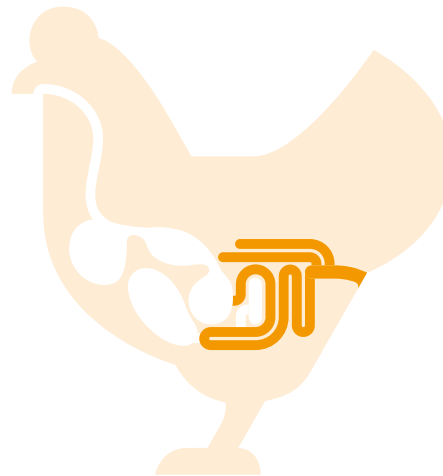
Fortifying intestinal health and supporting animal wellbeing

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
- Sustained wellbeing
- Economic and ecological sustainability

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

Where it works



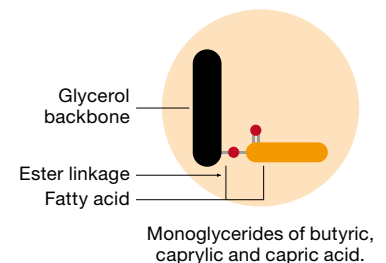
BalanGut™ LS's main active ingredients of monoglycerides of butyric, caprylic and capric acids are delivered via feed and are active throughout the small and large intestine.

Extra protection and ease of handling

The presence of ester bonds ensures:

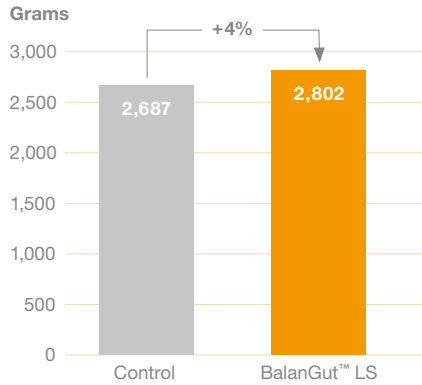
- Non-corrosivity
- Heat stability
- Non-volatility
- Non-pungent smell
- A pH-independent action in the gut

Monoglyceride

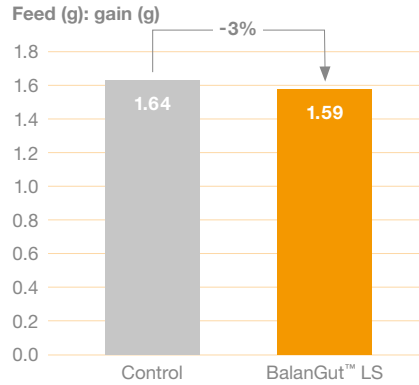


Results show BalanGut™ LS's positive impacts on broilers

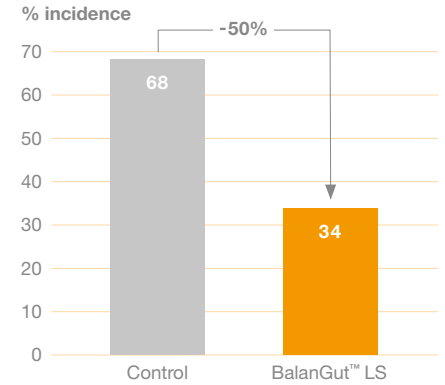
**Avg. body weight, g
(day 42)**



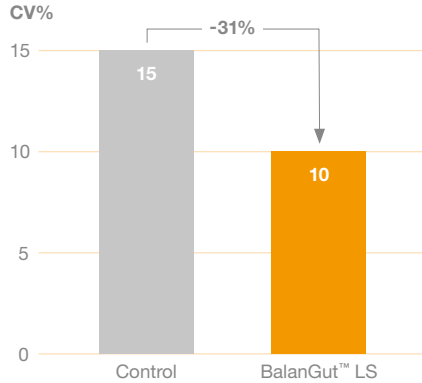
**FCR
(day 1- 42)**



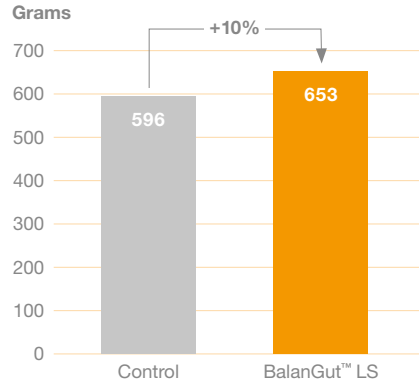
**Foot pad lesions
(day 42)**



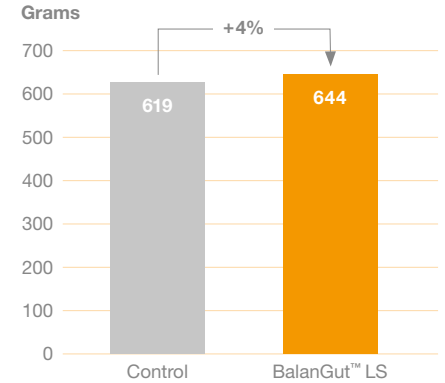
**Uniformity, CV%
(day 42)**



**Carcass yield, leg weight, g
(day 42)**



**Carcass yield, breast meat, g
(day 42)**



Trial 2. Broiler chickens raised under optimal clean research conditions supplemented with BalanGut™ LS at 500g/MT feed.

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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