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

animal-nutrition.basf.com
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
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

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


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)

Internal reference: TID-24-17
**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.

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**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.**

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**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.

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**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
Results show BalanGut™ LS’s positive impacts on broilers

<table>
<thead>
<tr>
<th>Avg. body weight, g (day 42)</th>
<th>FCR (day 1−42)</th>
<th>Foot pad lesions (day 42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>2,687</td>
<td>Control</td>
</tr>
<tr>
<td>BalanGut™ LS</td>
<td>2,802</td>
<td>BalanGut™ LS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uniformity, CV% (day 42)</th>
<th>Carcass yield, leg weight, g (day 42)</th>
<th>Carcass yield, breast meat, g (day 42)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>15</td>
<td>Control</td>
</tr>
<tr>
<td>BalanGut™ LS</td>
<td>10</td>
<td>BalanGut™ LS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Product name</th>
<th>Form</th>
<th>Application</th>
<th>Packaging</th>
<th>Article number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BalanGut™ LS P</td>
<td>Powder</td>
<td>Livestock</td>
<td>25 Kg Paper bag</td>
<td>50624860</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pigs, Poultry</td>
<td>650 Kg Big bag</td>
<td>50624881</td>
</tr>
<tr>
<td>BalanGut™ LS L</td>
<td>Liquid</td>
<td>Livestock</td>
<td>20 Kg Jerry can</td>
<td>50624857</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pigs, Poultry</td>
<td>1000 Kg IBC</td>
<td>50624858</td>
</tr>
</tbody>
</table>

Also available for aquaculture

<table>
<thead>
<tr>
<th>Product name</th>
<th>Form</th>
<th>Application</th>
<th>Packaging</th>
<th>Article number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BalanGut™ AQ P</td>
<td>Powder</td>
<td>Aquaculture</td>
<td>25 Kg Paper bag</td>
<td>50625849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish, Shrimp</td>
<td>650 Kg Big bag</td>
<td>50625855</td>
</tr>
<tr>
<td>BalanGut™ AQ L</td>
<td>Liquid</td>
<td>Aquaculture</td>
<td>20 Kg Jerry can</td>
<td>50624702</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish, Shrimp</td>
<td>1000 Kg IBC</td>
<td>50624706</td>
</tr>
</tbody>
</table>

Contacts

Asia/Pacific
BASF South East Asia Pte. Ltd.
Animal Nutrition, Asia/Pacific
7 Temasek Boulevard, #35-01
Singapore 038987
Singapore
Phone: +65-6337-0330
Fax: +65-6432-3298
E-mail: animalnutrition-asia-pacific@basf.com

North America
BASF Corporation
Animal Nutrition, North America
100 Park Avenue
Florham Park, New Jersey 07932
USA
Phone: +1-800-527-9889
Fax: +1-973-245-6766
E-mail: animalnutrition-north-america@basf.com

Europe, Africa, West Asia
BASF SE
Animal Nutrition, Europe
Chemiestrasse 22
68623 Lampertheim
Germany
Phone: +49-62160-28073
Fax: +49-62160-28363
E-mail: animalnutrition-europe@basf.com

South America
BASF S.A.
Animal Nutrition, South America
Avenida das Nações Unidas 14.171–10th floor
04794-000 São Paulo SP
Brazil
Phone: +55-11-2039-2292
Fax: +55-11-2039-2344
E-mail: animalnutrition-south-america@basf.com

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