

FOR SALMONELLA SPP
1st FEED ADDITIVE IN EU
CONTAMINATION REDUCTION

WELL FED
TO FEED YOU WELL



Levucell SB
titan

Specific probiotic yeast for monogastrics

GUT HEALTH MANAGEMENT

SPECIFIC LIVE YEAST FOR MONOGASTRICS

There are thousands of strains of *Saccharomyces cerevisiae*, wild or domestic and evolved from a single species. Genetically similar, they can vary greatly from a metabolic standpoint. Amongst them, *S.c boulardii* is a very specific one:

- With a **strong scientific background**, including more than 300 publications in human, rodents, etc.
- **Used in human medicine** to cure digestive pathologies such as travellers's and antibiotics associated diarrheas.

LEVUCCELL SB is the **live yeast *Saccharomyces cerevisiae boulardii*** CNCM I-1079, registered as a feed additive in the European Union for chickens and minor avian species for fattening (4d1703).

THREE LINES OF DEFENSE STRATEGY

MICROBIOTA BALANCE

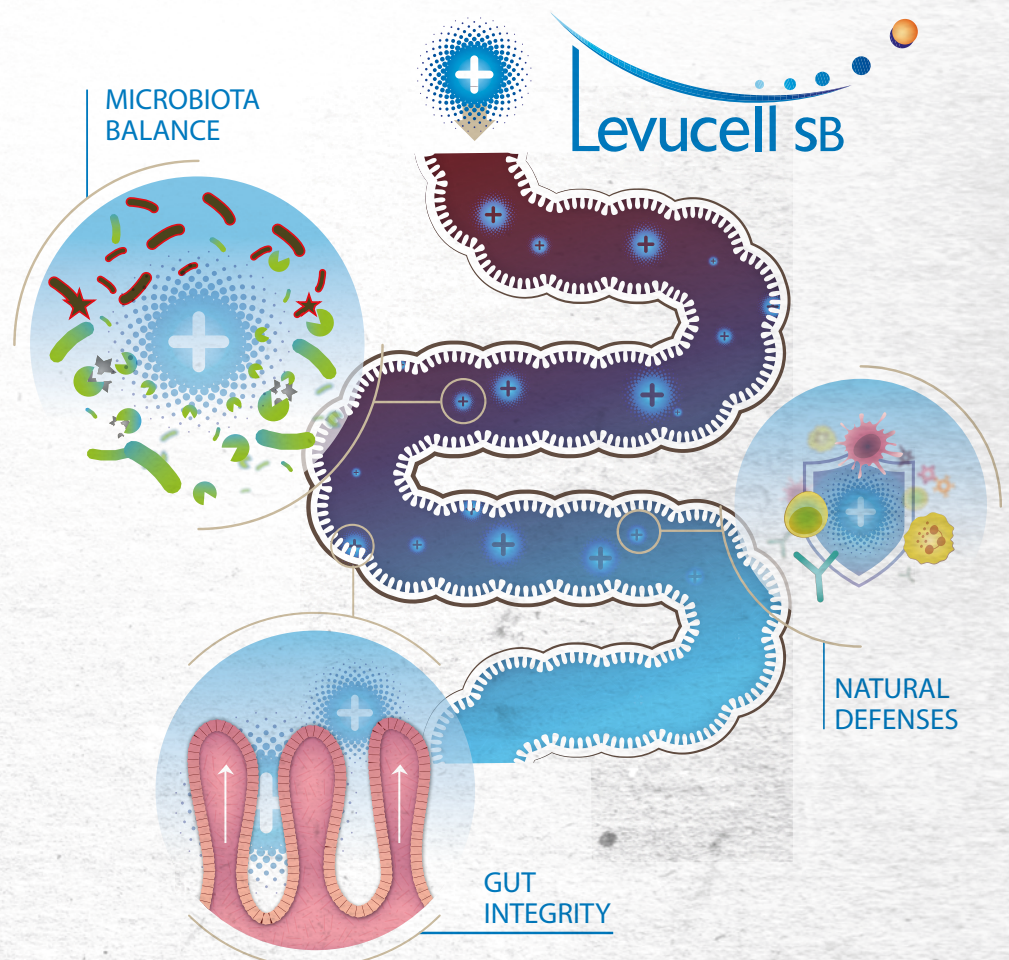
LEVUCCELL SB supports the growth of beneficial bacteria and **interferes with the colonization of undesirables** ones. It has the specific capacity to **inhibit some microbial toxins activity** (*Clostridium difficile* Toxin A, *E. coli* endotoxin).

GUT INTEGRITY

LEVUCCELL SB helps increase crypt depth and villus height. **The positive effect on tight junctions' regulation** limits intestinal permeability.

NATURAL DEFENSES

Birds' natural defenses are reinforced thanks to a **local immune system modulation**.



FOOD CHAIN SAFETY

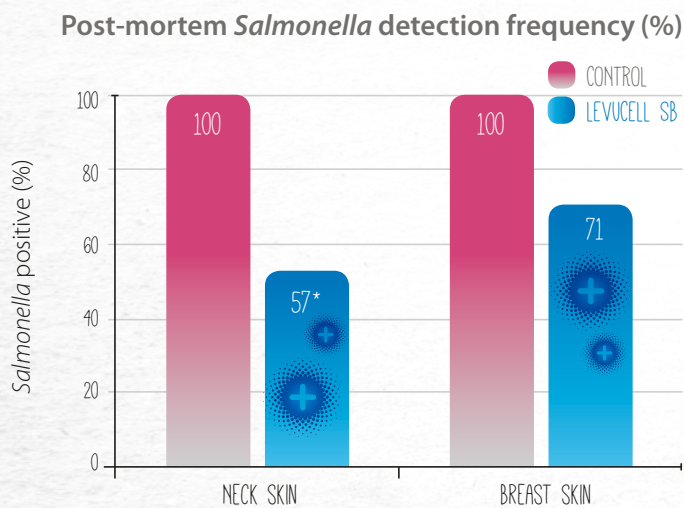
REDUCTION OF MICROBIAL CONTAMINATION ON CARCASSES OF BROILERS

Salmonella spp. and *Campylobacter* spp. are gram-negative bacteria involved in the two main food-borne diseases that the worldwide poultry industry has to face.

Thanks to its unique properties supporting a balanced intestinal microbiota, **LEVUCELL SB** has demonstrated its capacity:

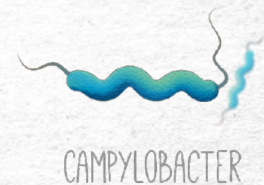
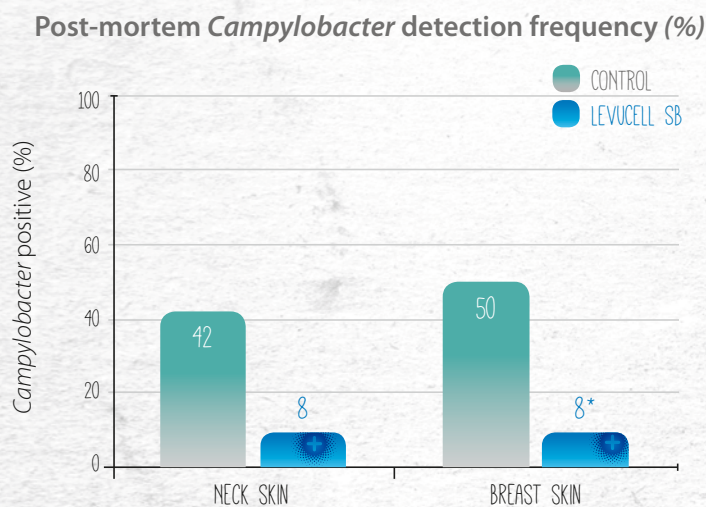
- to help **reduce enteropathogens loading** in the gut and **on carcasses**.
- to help **reduce the incidence on performance** of stress-inducing situations.

LEVUCELL SB is the 1st probiotic authorized in the European Union for the **reduction of *Salmonella* spp. contamination on carcasses** of broilers.



✓ **Reduced prevalence of *Salmonella enteritidis* contamination on birds' carcasses.**

(Mountzouris *et al.*, 2015. Poultry Science, Vol 94, Issue 10, p2245-2455.)



✓ **Reduced prevalence of *Campylobacter jejuni* contamination on birds' carcasses.**

(Fanelli *et al.*, 2015. Biotechnol. Agron. Soc. Environ. 19(1), 3-10.)

TITAN TECHNOLOGY

UNIQUE PROTECTION FOR A LIVE YEAST



- ✓ **LEVUCCELL SB** benefits from the patented **titan** technology of **microencapsulation** that protects the live yeast against extreme pelleting process (heat, pressure, humidity) and interaction with other chemical compounds used in feed manufacture.
- ✓ **LEVUCCELL SB** is **intrinsically resilient to antibiotics** without risk of genetic material transmission.

The **1st probiotic authorized** in the **European Union** for the **reduction of *Salmonella* spp. contamination** on carcasses of poultry.

A documented capacity to **support a balanced intestinal microbiota** and thus **limit the incidences on performance** of gut unbalance.

The **TITAN technology** to provide an optimal stability during the feed pelleting process.



Not all products are available in all markets nor associated claims allowed in all regions.

LALLEMAND ANIMAL NUTRITION ■ SPECIFIC FOR YOUR SUCCESS
www.lallemandanimalnutrition.com

LALLEMAND