

# Balancius™

## GUT HEALTH INNOVATION FOR TURKEYS

**Balancius™ breaks down dead bacterial cell debris in the intestinal tract, allowing turkeys to digest and absorb nutrients. Balancius also improves feed conversion, optimizes gastrointestinal functionality and keeps litter drier.**

### The Hidden Threat to Poultry Profitability

The greatest threats to efficient and profitable poultry performance are the ones that go unobserved. These hidden threats secretly chip away at normal bird digestive processes, diverting nutrients and energy away from growth and efficiency. Peptidoglycans (PGNs) fit this description and may be robbing poultry operations of profits right now.

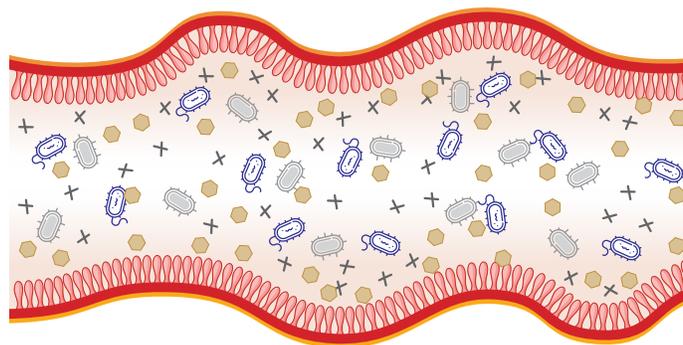
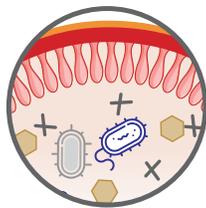
### Understanding Dead Bacteria in the Gut

- PGNs are the main components of dead bacterial cell debris, constantly being released into the gastrointestinal tract as bacterial cells divide and die. This debris is always present and occurs in all animals, regardless of their nutrition or life stage
- PGNs can potentially impede normal digestive and absorptive processes by interfering with enzyme-substrate connections necessary for nutrient digestion. They may also decrease absorption by the microvilli to lower nutrient uptake

### Bacterial Cell Debris is an Overlooked Area

- Today, all interventions (nutritional and health) target living bacteria
- No current product or solution targets the bacterial cell debris

The poultry intestinal tract includes nutrients, living and dead bacteria and dead bacterial cell debris called peptidoglycans or PGNs.



Living bacteria



Dead bacteria



Dead bacterial cell debris (PGNs)



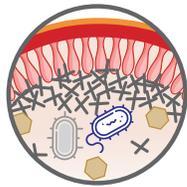
Nutrients



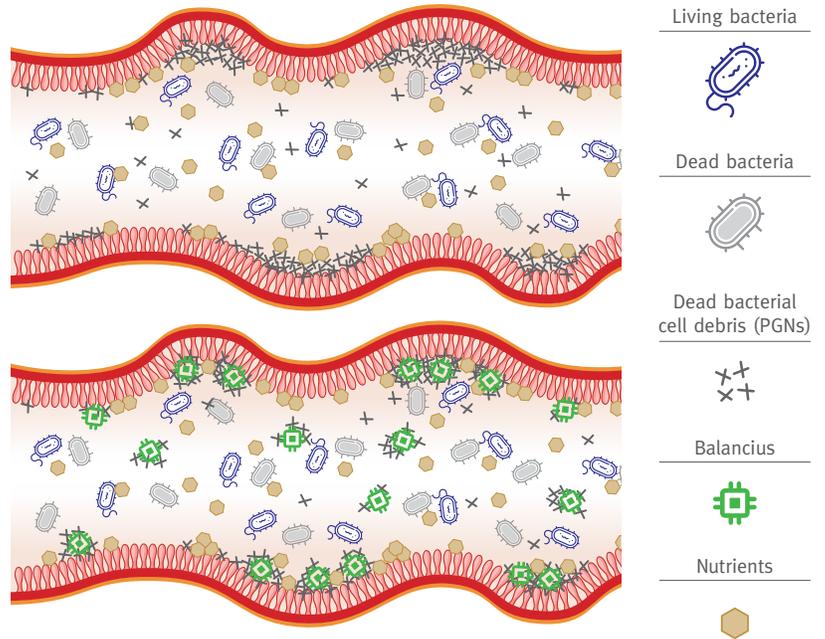
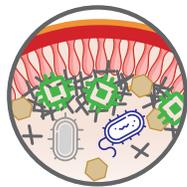
## Balancius is a Game Changing Innovation

- Balancius is the first and only feed ingredient designed to unlock the hidden potential in gastrointestinal functionality by targeting PGNs
- Balancius breaks down (hydrolyzes) PGNs from bacterial cell debris in the intestinal tract, improving nutrient availability and uptake, and subsequently, feed conversion

Peptidoglycans accumulate throughout the intestinal tract and may block absorptive sites on the cellular wall lowering nutrient uptake.



Balancius targets and breaks down PGNs throughout the intestinal tract to improve nutrient uptake and feed conversion.



## Turkey Trials

During the past two years, Balancius has been tested at research and commercial turkey facilities throughout the world. Trials evaluated feed conversion, body weight and other benefits in turkeys.

**SEVEN TRIALS**  
IN U.S. AND EUROPE  
**RESEARCH**  
AND COMMERCIAL  
**MALE & FEMALE TURKEYS** | DOSE RANGE = 25-50K

**TRIAL**  
LENGTH  
**UP TO 19**  
**WEEKS**




*If not us, who? If not now, when?*  
**WE MAKE IT POSSIBLE**

Follow us on:    

Visit us at:  [dsm.com/balancius-us](https://dsm.com/balancius-us)

Balancius is a trademark of DSM Animal Nutrition and Health.  
DSM10-0837

NUTRITION • HEALTH • SUSTAINABLE LIVING

