

# PoultryStar®

Healthy gut – strong bird!



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# What is PoultryStar®?

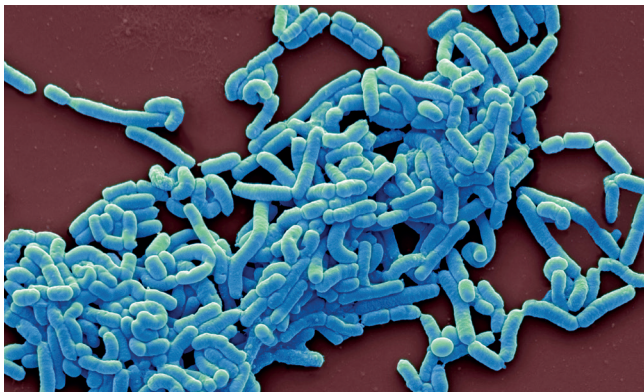
PoultryStar® is a well-defined synbiotic, which can be used in water and feed to promote the establishment of beneficial gut microbiota through the combined action of specially selected probiotic bacterial strains and prebiotic fructooligosaccharides (FOS) from inulin.

The synbiotic PoultryStar® is designed to create competitive exclusion against opportunistic and pathogenic bacteria and to support gastrointestinal health. Early application and prophylactic use of PoultryStar® aims to make day-old chicks and birds of all ages more resistant to the colonization of pathogens, leading to an improved animal health and food safety.

## PoultryStar®

### Active Ingredients / Mode of action

#### Probiotic strains



The synbiotic PoultryStar® contains bacterial strains from different genus. All our patented probiotic strains were patented and thoroughly investigated in our laboratories. They were selected due to their superior probiotic features, such as effective attachment to the gut receptors, out-competition of opportunistic and pathogenic bacteria, acidification of the inner mucosa layer, production of specific bacteriocins, activation of the immune system and synergistic effects among the inhabitant microbiota. As the probiotic strains were isolated out of the gut of healthy chickens, they are host-specific. Hence, justifying their safety and effectivity to be used throughout different poultry production systems. In addition, the strains were selected from key parts of the chicken intestinal tract, thus, ensuring colonization and proliferation through the whole of the digestive tract, including the caeca.

#### Prebiotic source



An important part of the formulation of our synbiotic PoultryStar® is the inclusion of fructooligosaccharides (FOS), which naturally occur in plants, such as chicory. They were selected and tested in our laboratories for their ability to selectively stimulate the growth and activity of the probiotic bacteria in the product and other beneficial bacteria in the gut. These oligosaccharides are isolated from inulin and function as a nutrient source for beneficial bacteria from the genera *Lactobacillus* and *Bifidobacterium*, thus promoting their growth through scientifically proven concept known as the „Bifidogenic Effect“.



# Benefits and Application

## Why use PoultryStar®?

A balanced gut microbiota is known to play a significant role in protecting day-old chicks and birds of all ages against colonization by opportunistic and pathogenic bacteria. In modern poultry production systems biosecurity is essential, emphasis in hatchery plants is done to protect day-old chicks from early exposure to pathogens. However, biosecurity practices also reduce the number of beneficial bacteria in the environment leaving day-old chicks vulnerable to the invasion of opportunistic pathogens.

The early application of PoultryStar® will effectively seed the gut with probiotic bacteria, helping the birds to establish and maintain a balanced microbial gut ecosystem, leading to improved animal health, productivity and food safety.



## When to use PoultryStar®?

The application of PoultryStar® is flexible and can be adapted to different poultry production system, under different environments. The product line comprises a soluble version (sol) for drinking water and a microencapsulated (me) version for feed applications that withstand pelleting processes. The two versions are available in two different concentrations for a more versatile application.

The use of PoultryStar® is especially beneficial to (re)-establish, and develop the microbiota in poultry post-hatching, during phases of intestinal stress and periods of high pathogenic challenge:

Dysbiosis			Gut bacterial challenge
Necrotic enteritis	BCO lameness	Antibiotic treatment	Vaccination
Transportation	Feed change	High stocking density	Heat stress

## Main benefits of PoultryStar®

- Fast establishment of beneficial gut microbiota
- Reduction of early mortality and over all morbidity rates
- Re-establishment of balanced gut microbiota post antibiotic application
- Reduction of enteric opportunistic and pathogenic bacteria
- No negative side effects, no withdrawal period

Numerous trials have confirmed the positive effects of PoultryStar® under scientific and field conditions.



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October 2023

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