

Animal Nutrition

◀ DUPONT ▶™



Syncra® AVI

**Active protection
for your birds**

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The world of poultry production is changing and needs advanced feed strategies designed for modern manufacturing environments with the reduction or removal of antibiotics.

Syncra® AVI is a combined enzyme and probiotic solution designed to maximise nutrient digestion, gut health and performance. Its unique formulation contains enzymes, which improve nutrient digestibility and flock uniformity, as well as probiotics formulated to actively protect against health challenges and accelerate immune development.

DuPont enzymes

- Improved digestibility and performance
- Improved flock uniformity
- Flexibility on ingredient use



DuPont probiotics

- Protection against health challenges
- Accelerated immune development
- Proven efficacy on >500 farms



Maximised nutrient digestibility



Microbial modulation



Improved intestinal integrity
Immune response modulation

How does it work?

Syncra® AVI delivers measurable performance improvements via five interlinked mechanisms:

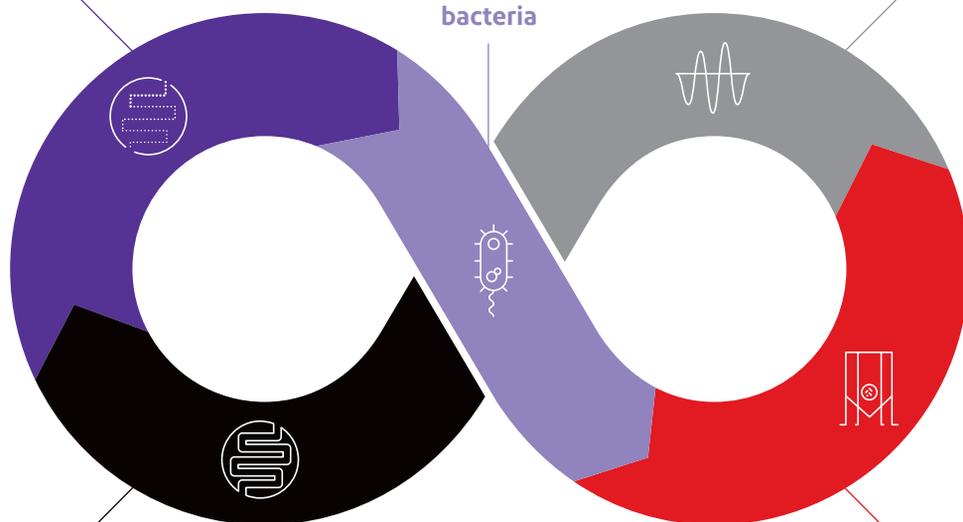
Improves digestibility

Decreases levels of non-beneficial bacteria

Modulates immunity and inflammation

Improves gut structure

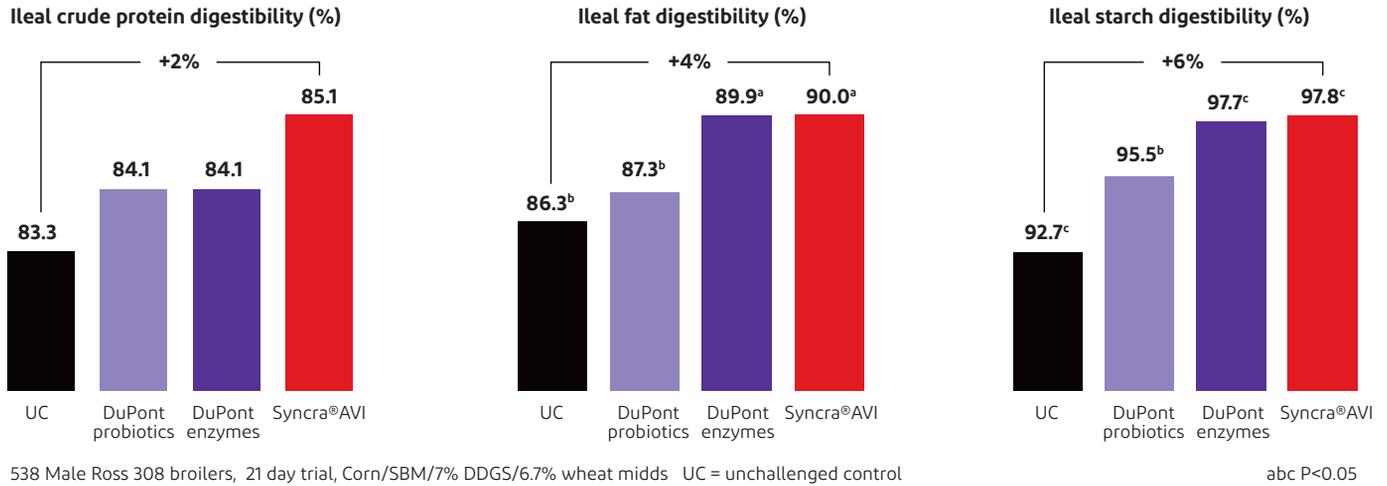
Beneficially changes microbial fermentation



Benefits of Syncra® AVI

Maximises nutrient digestibility

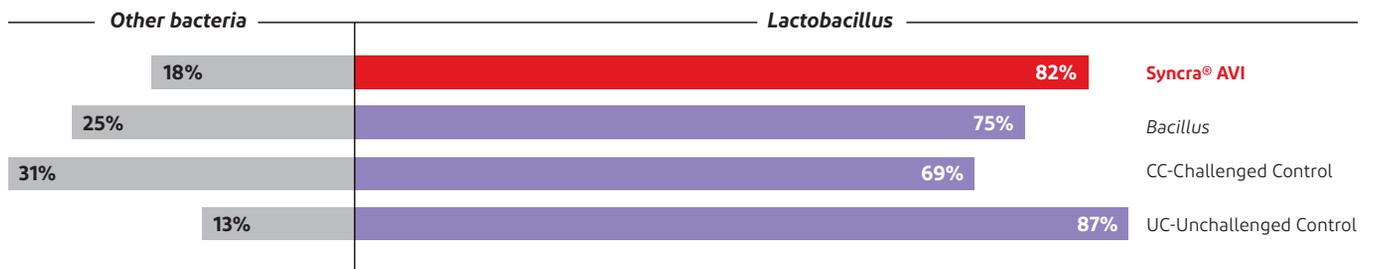
Syncra® AVI enhances digestibility of key nutrients in broiler diets; meaning less undigested substrate reaches the terminal ileum where it could otherwise act as a food source for non-beneficial bacteria.



Increases beneficial bacteria in the gut

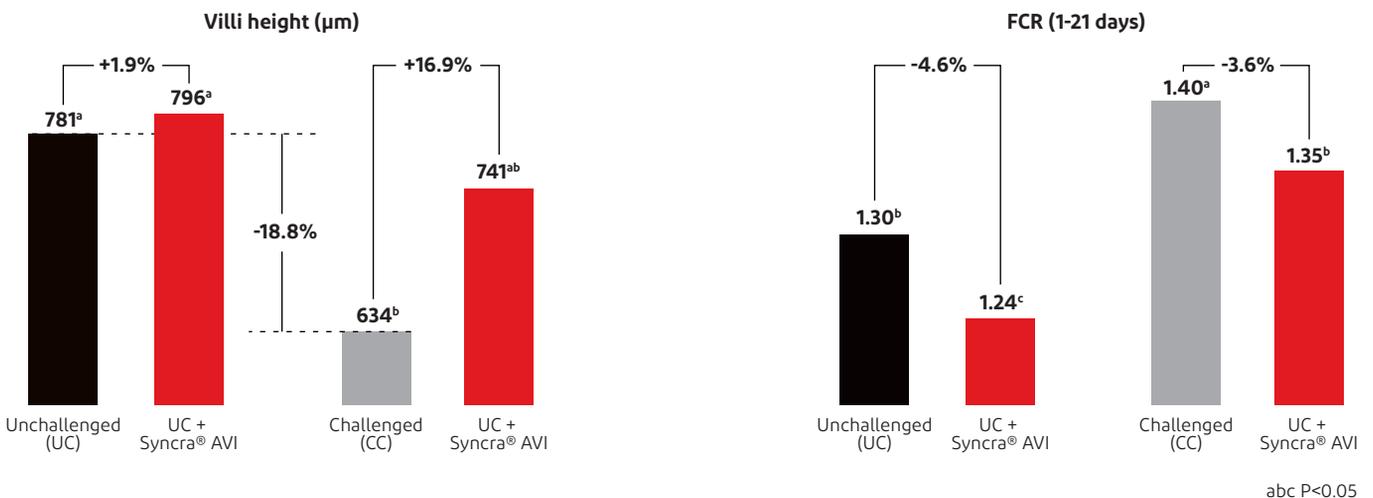
Syncra® AVI modulates the microflora; creating a beneficial gut environment which suits beneficial bacteria, such as *Lactobacillus*, and helps maintain populations — even in times of challenge.

Relative proportion of *Lactobacillus spp.* at 21 d in the jejunum of broiler chickens *ChiSq.* <0.0001



Closes the gut borders against threats

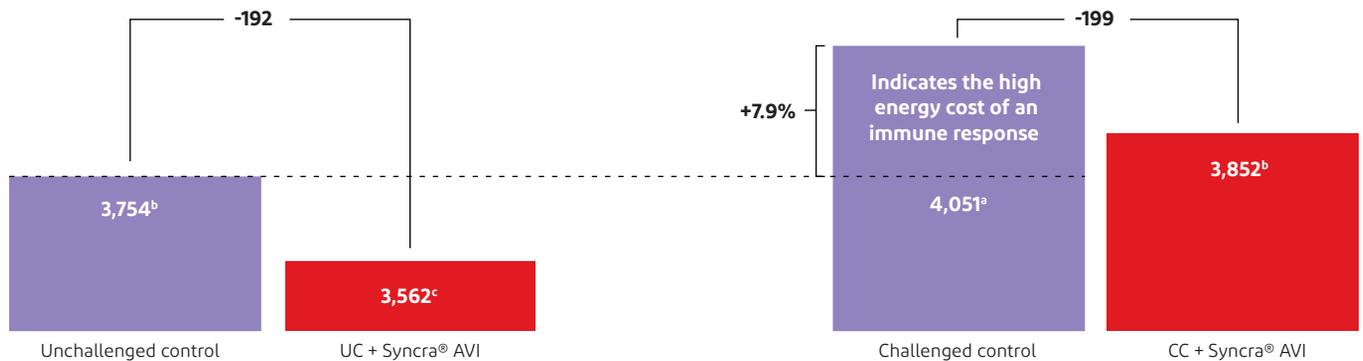
Syncra® AVI helps regulate acute induced immune responses during challenge - so reducing gut damage and improving performance. It has also been shown to improve gut integrity; resulting in improved functioning of tight junctions in the gut wall, which are the first line of defense against non-beneficial bacteria.



Reduces the energy costs of immune responses

When challenges are present, calorie conversion data indicates the energy cost of the immune response. Challenged birds require more calories per kg growth than unchallenged birds because energy is diverted towards fighting the challenge and away from growth. Under these circumstances, Syncra® AVI helps to restore balance to the intestinal tract environment, which reduces the energy costs of immune responses and so maintains performance at the level of an unchallenged bird. A positive outcome which is particularly important, given widespread restrictions on the use of antibiotics.

Calorie Conversion (kcal/kg bodyweight gain)



Creates a favourable nutrbiotic state



Nutrition

- Improved digestibility
- Improved energy utilisation
- Improved fibre breakdown and AXOS production

Microbiome

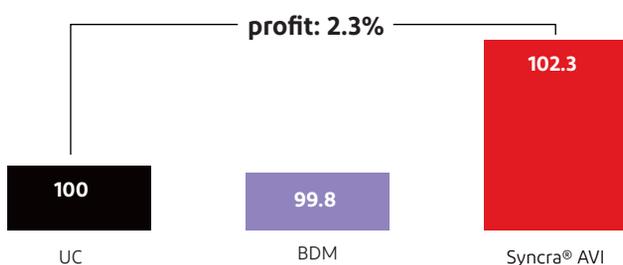
- Increased beneficial bacterial populations
- Decreased non-beneficial & opportunistic bacteria
- Positive changes in fermentation patterns

Gut and immune function

- Improved intestinal integrity and structure
- Reduced risk of inflammatory response
- Reduced physiological stress

Improves profitability compared to AGPs

Relative profit (income-feed cost \$, % improvement)



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