

Handprint of low crude protein concepts powered by MetAMINO®

Evonik's nutritional expertise improves environmental outcomes in livestock production

Sciencing the Global Food Challenge

Evonik's Next Generation Solutions enable positive sustainability impacts for our customers

Lifecycle assessment study:

- We conducted a lifecycle assessment (LCA) of Evonik's recommended diets to quantify the environmental benefits of Evonik solutions versus market reference diets for broilers, layers and swine.
- The study was conducted by Evonik nutritionists and LCA specialists, critically reviewed by external experts, and independently certified by TÜV Rheinland against quality standards ISO 14040 and 14044.

Study results:

- The study demonstrates that compared to reference diets, Evonik's full-service recommendation on optimal amino acid supplementation of animal feed reduces greenhouse gas (GHG) emissions, land use and eutrophication potential in broiler, layer and swine production.
- The majority of the GHG savings arise from lower use of soy enabled by higher amino acid supplementation. Similarly, the land use savings arise from the lower use of crude protein sources such as soy, corn and wheat. The improvements in eutrophication potential are largely driven by decreased nitrogen in animal excretions resulting from lower crude protein diets.
- Overall the study demonstrates that amino acid-balanced, low crude protein diets enable positive sustainability impacts without compromising animal performance.
- Watch our short explainer on the topic [here](#).

Potential of low protein diets



Comparative Life Cycle Assessment



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	GHG emissions reduction	Land use reduction	Eutrophication potential reduction
Broiler	-14%	-9%	-10%
Laying hens	-13%	-13%	-12%
Swine	-9%	-6%	-9%

Data displayed represent global results.

The assessments for each species consider regional variations with respect to available feed raw materials and protein levels in feed.

Making sustainability tangible – inoSust®

- inoSust® is Evonik's service offer that helps clients to calculate and improve the environmental footprint of feed and animal protein production.
- The results, achieved through semi-automated lifecycle analysis, can be third-party certified and used to communicate credible and reliable performance improvements to stakeholders.

Contact

Find out how Evonik can help you calculate, optimize and communicate nutritional and sustainability outcomes in animal production.

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