

# Harness the power of guanidinoacetic acid for your poultry

ACHIEVE FULL GROWTH POTENTIAL FOR YOUR BROILERS WITH A REDUCED-ENERGY DIET AT LOWER COSTS

**With GuanAMINO®, you maintain animal performance, meat quality and revenues, all while keeping your feed costs down.**

## THE CHALLENGE

Feed is likely to be the biggest cost factor at your farming operation. With costs skyrocketing mainly driven by energy supplying ingredients like **vegetable oils**, producers must look for smart solutions to maintain their margins. As this situation is unlikely to be resolved soon, the challenge facing nutritionists and poultry producers is how to maintain animal performance, meat quality and revenues, all while keeping feed costs down. By **optimizing the energy metabolism** of your birds, you ensure just that.

With raw material prices at a record high, so is the potential to reduce feed costs. GuanAMINO® is your opportunity to gain a competitive advantage.

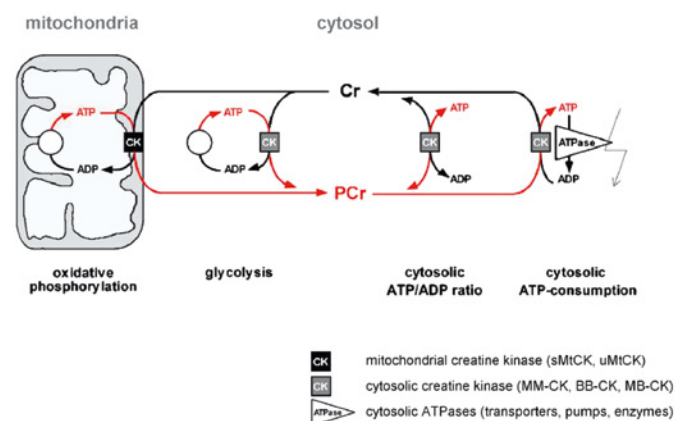
**GuanAMINO®** is a feed supplement that provides your animals with **guanidinoacetic acid (GAA)**, the natural metabolic precursor to creatine. **GuanAMINO®** supplementation leads to even higher creatine levels in the birds compared with direct creatine supplementation.

GAA supplementation in energy reduced diets spares high-cost ingredients (e.g. oils)

1. It can help your birds **grow faster at reduced costs when dietary energy is reduced by 50 kcal/kg.**
2. It can help your birds **gain equal weight** as standard fed birds **at even lower costs when dietary energy is reduced by 100 kcal/kg.**

## HOW DOES IT WORK?

Creatine acts as a **battery** as well as an **energy transporter**, mainly in muscle tissue but basically for all cells. In particular, creatine stores and carries energy in the form of creatine phosphate that can regenerate the levels of adenosine triphosphate (ATP), the universal supplier of energy in cells, at times of high energy demand. In other words: Optimal levels of creatine inside the cells of your birds lead to optimum energy-availability and -efficiency.

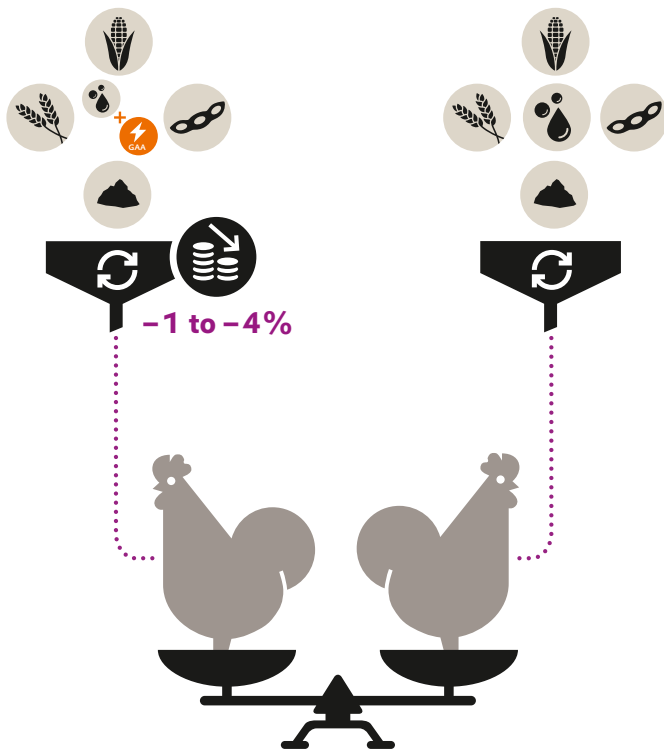


Schlattner et al., 2006

## THE ECONOMICAL BENEFITS

An economical solution that enables a reduction in the energy level of the diet while maintaining bird performance is the dietary supplementation of GAA. The trial results confirm what we know about the energy sparing potential of GAA which can be up to 100 kcal/kg feed. Considering the energy matrix of GuanAMINO® in feed formulation can contribute to significantly decrease the inclusion of oil.

At current high feed prices, reducing the dietary energy level by 100 kcal via the exchange of oil with grain and GAA is reducing the feed cost by 15 to 20 USD/ton.



### Why choose GuanAMINO® from Evonik?

- It is the **best supplemental creatine source** from a world leading manufacturer of animal products.
- It significantly enhances energy metabolism, ensuring the **health and performance** of your livestock.
- It reduces the amount of expensive raw materials needed for livestock feed, **substantially lowering your costs**.
- It is characterized by **excellent bioavailability and processability** at your farming operation.

### NUTRITIONAL MATRIX

NUTRIENT	MATRIX VALUE	
Guanidinoacetic acid (GAA)	96 %	
Digestibility	100 %	
Crude protein (N x 6.25)	221 %	
Arginine sparing*	≥ 77 %	
ENERGY	[MJ/kg]	[KCAL/kg]
AME <sub>N</sub> sparing	≥ 347	≥ 83,000

Trial data indicates that the energy sparing potential of GuanAMINO® can be at 100kcal / kg feed or even higher. This equates to ≥ 166,000 kcal / kg GuanAMINO®.

\* GuanAMINO® significantly improves weight gain and feed conversion in arginine-adequate, but particularly in arginine-deficient diets. Recent research has indicated that 1 kg of GuanAMINO® can spare at least 770 g dietary arginine.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND / OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and / or recommendations at any time, without prior or subsequent notice.

#### EVONIK OPERATIONS GMBH

Nutrition & Care  
Animal Nutrition Business Line

animal-nutrition@evonik.com  
evonik.com/animal-nutrition

