

# Empyreal® 75 Amino Acid Digestibility in Ileal-Cannulated Pigs

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**Background:** Pigs, as any other livestock, require energy, amino acids, minerals and vitamins for proper growth and development. Which ingredients these nutrients are obtained from are not imperative, as soon as they are digestible, absorbable and available in accurate proportions, predominantly in their early ages for optimal future development. An indirect look at how pigs digest and absorb the nutrients in Empyreal 75 will further assist on formulating feed for this livestock.

**Objective:** Assess the standard amino acid digestibility of Empyreal 75 in ileal-cannulated pigs.

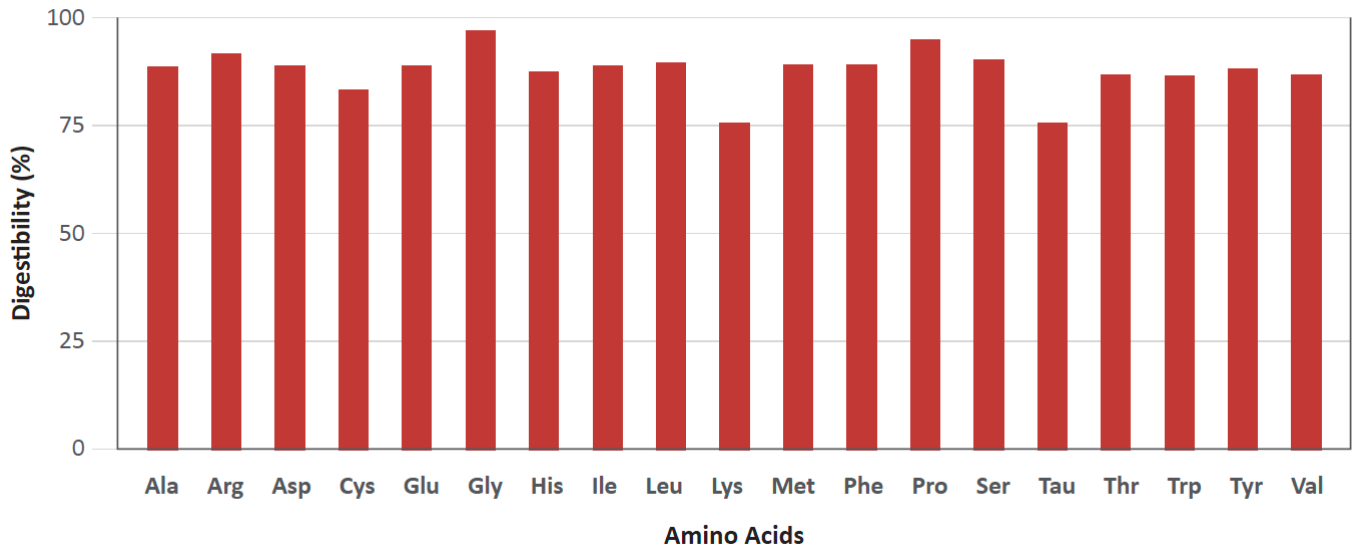
## Materials and Methods:

- A nitrogen-free diet, or a diet with Empyreal 75 (28.3% inclusion, 21% crude protein diet), was fed for two weeks to 12 ileal-cannulated pigs (six animals per treatment).
- Pigs were fed twice a day at three times the pig daily ME maintenance requirement (NRC, 1998).
- Digesta samples were freeze-dried and pooled within pig and period and amino acid was analyzed.

## Results:

- The pigs responded very well to the diet palatability.
- The amino acid digestibility numbers were very good, averaging 90%.
- The overall animal performance and health of the animals were excellent.

Standard Ileal Amino Acid Digestibility (SID) of Empyreal 75



### Conclusions:

- Empyreal 75 is a high-quality, highly concentrated natural protein.
- The nutritional composition of Empyreal 75 is extremely consistent in every batch, creating a consistent feed formulation.
- Presence of natural antioxidants (carotenoids) gives Empyreal 75 a long shelf life and boosts the piglet's immune system.
- A flowable, consistent and fine particle presentation of the ingredient makes it to easy blend in the diet, with very good digestibility numbers for growth and health.
- Feeding baby pigs diets made with Empyreal 75 helps ensure a consistent, high-performing starter diet to accelerate growth early in life, giving the farmer peace of mind, and making your feed mill their partner of choice.

Cargill Branded Feed creates proprietary feed ingredients to improve digestive health and performance for production animals in the beef, dairy, aquaculture and pet food markets. Branded Feed is a segment of Cargill Starches, Sweeteners & Texturizers (CSST).

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