

Pro88™ - Nutritional Ingredient and Attractant for the Swine and Pet Food Industries

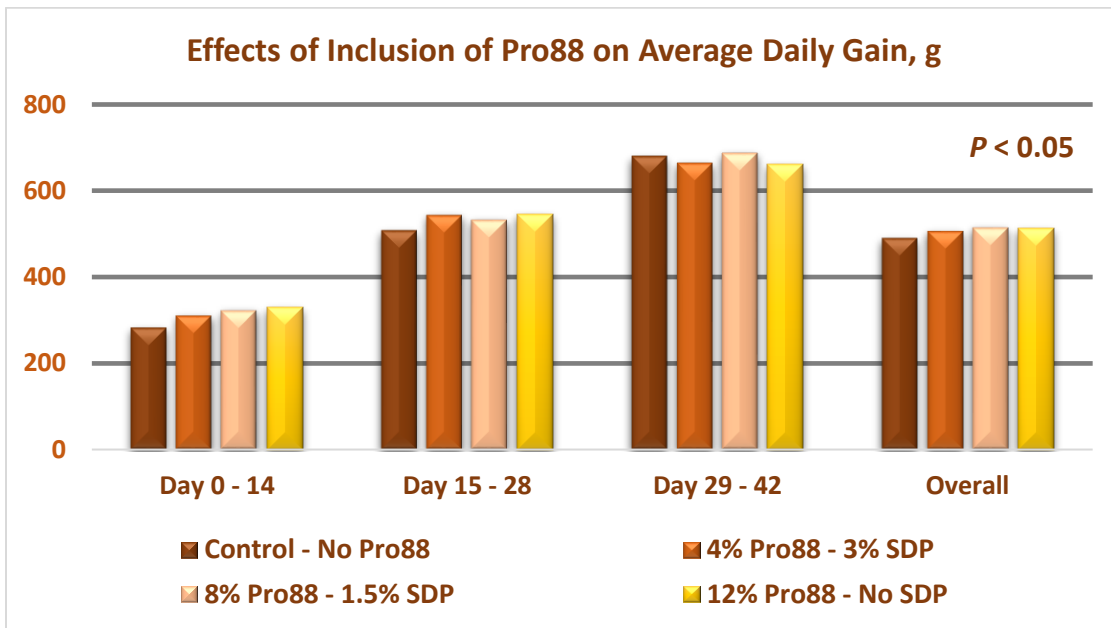
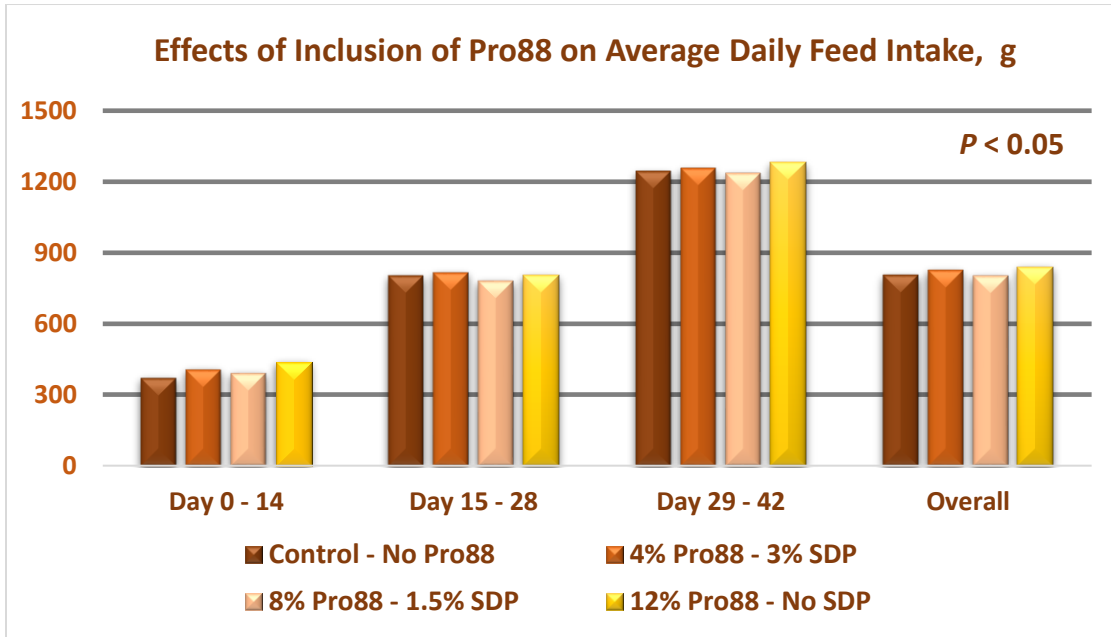


Pro88 is a dried cheese product described as a tan to yellow powder with a cheese odor. The production process of Pro88 includes cheese and soybean meal as an agent to facilitate the drying process. It is a high-quality protein and fat source with a low cost that can replace or complement spray-dried plasma, fish meal, or fermented soybean meal in diets for early weaning pigs. Pro88 is highly palatable, contributing to a smoother transition in early weaning pigs, increasing the feed intake, and delivering highly digestible nutrients.

Nutrient Composition of Pro88™	
Crude Protein	40% Min.
Crude Fat	18% Min.
Crude Fiber	1-3%
Moisture	10% Max.
Metabolizable Energy	4.45 kcal/g
Ash	6-7%
Phosphorus	0.79%
Calcium	0.86%

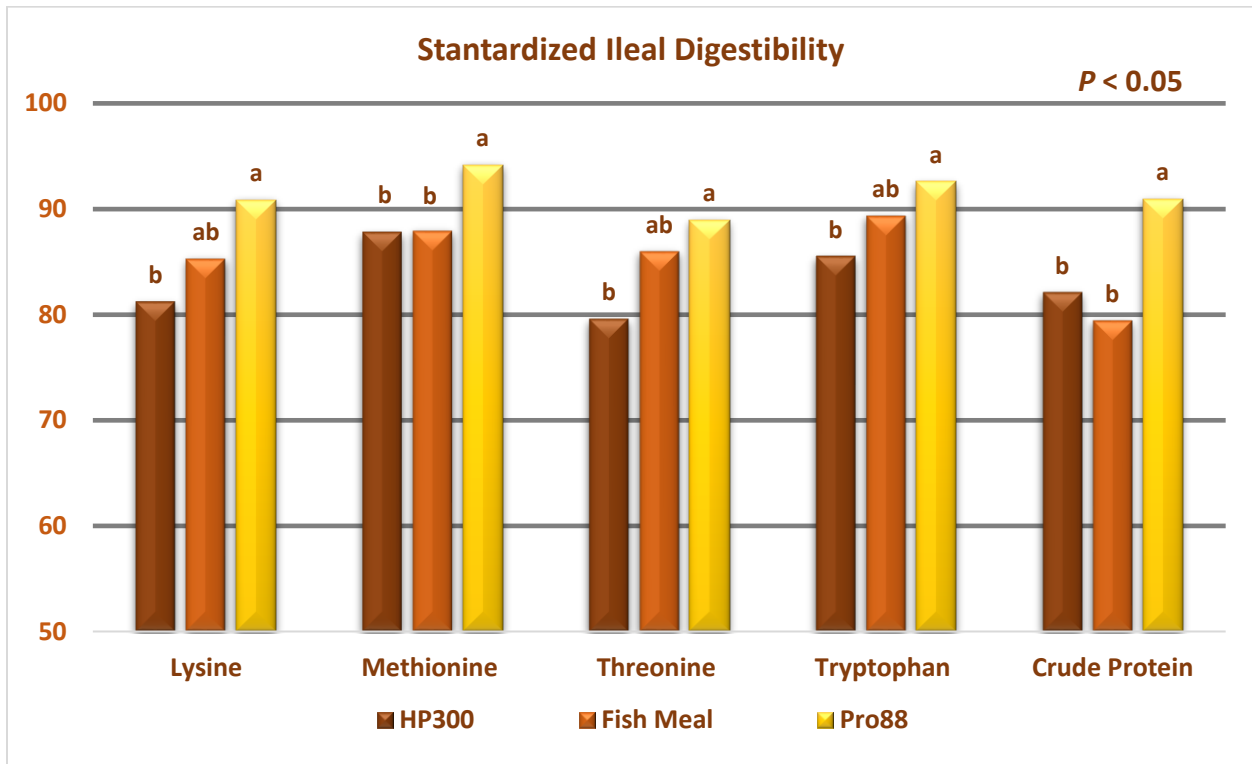
Amino Acid Profile and Standardized Ileal Digestibility (SID) of Amino Acids					
Indispensable			Dispensable		
Amino Acid	Concentration (%)	SID	Amino Acid	Concentration (%)	SID
Arginine	2.49	96.46	Alanine	1.75	88.55
Histidine	1.18	93.32	Aspartic Acid	4.14	87.89
Isoleucine	2.16	92.21	Cysteine	0.46	78.96
Leucine	3.65	93.09	Glutamic Acid	8.05	91.13
Lysine	3.05	90.86	Glycine	1.42	88.14
Methionine	0.81	94.16	Proline	2.96	96.36
Phenylalanine	2.25	93.19	Serine	2.02	91.57
Threonine	1.67	88.97	Tyrosine	1.90	94.27
Tryptophane	0.59	92.57			
Valine	2.45	91.60			

Growth Performance Study



- Overall (d 0 to 42), the partial or complete replacement of spray-dried plasma with Pro88 had no adverse effects on ADFI or ADG.
- Inclusion of Pro88 in diets for weaning pigs is up to 12%

Amino Acid Digestibility Study



- Greater ($P < 0.05$) SID values were observed for CP and most amino acids in Pro88 than HP300 and fish meal.
- Values of digestibility for the limiting amino acids in pigs are greater ($P < 0.05$) in Pro88 than in HP300 and fish meal.
- This study indicates that Pro88 is a highly digestible source of amino acids when fed to weanling pigs.

Packaging and Stability

- Packaging as requested. 50 or 55 lb. multi-lined paper bags or 2,000 to 2,200 lb. super sacs.
- Pro88 has a shelf life of at least 12 months when held under dry and cool storage conditions, conserving its protein concentrations, fat, and moisture.