An alternative protein for use in swine, poultry, dairy, aqua, and companion animals.





# ALTIPRO™

## High Protein Feed Ingredient

A high protein feed ingredient created for animals today and into the future. This **50% protein product** provides highly bioavailable amino acids and minerals. **ALTIPRO™** is an innovative alternative fermented corn protein technology made for today's successful production operations.

The more ingredients we have to formulate animal diets, the more resilient animal agriculture becomes. **ALTIPRO™** adds one more tool for producers, nutritionists, and formulators to use in building nutritional excellence.

Our new ingredient is available, produced at scale, consistent, and economically feasible for animal diets.

## Product Application

An alternative protein for use in swine, poultry, dairy, aqua, and companion animals.

## Efficacy Studies

Studies in swine and poultry have demonstrated that **ALTIPRO™** can be formulated into diets at 10-15% inclusion by reducing corn, soybean meal, or other higher priced ingredients safely and effectively without changing animal performance.

Studies in shrimp, tilapia, salmon, and trout, have demonstrated that **ALTIPRO™** can effectively displace 12 – 20% of the dietary protein sources depending on the aqua species.

**Ingredient Comparison**

| Source | DM (%) | Protein (%) | Fat (%) | Fiber (%) | Ash (%) | Lysine (%) | Meth (%) | Gross Energy (Kcal/kg) |
|---|---|---|---|---|---|---|---|---|
| **ALTIPRO™** | 100 | 55.18 | 4.7 | 6.6 | 2.1 | 1.9 | 1.15 | 5568 |
| Corn | 100 | 8.8 | 4.1 | 2.6 | 1.4 | 0.3 | 0.21 | 4919 |
| DDGS | 100 | 30.7 | 3.4 | 10.6 | 5.9 | 0.8 | 0.55 | 5283 |
| Soybean Meal 46.5 | 100 | 51.4 | 1.9 | 7.2 | 7.4 | 3.0 | 0.65 | 5204 |
| Soybean Protein Concentrate | 100 | 84.4 | 2.5 | 1.3 | 4.6 | 5.2 | 0.87 | 5280 |
| Poultry By-Product Meal | 100 | 57.6 | 20.6 | 1.1 | 15.6 | 2.6 | 0.81 | 5411 |
| Canola Meal | 100 | 38.1 | 2.4 | 14.3 | 7.6 | 2.0 | 0.67 | 5102 |

* Values are averaged from multiple sources.

*AltiPro™ supports small, family-owned farms across the United States*

# PRODUCT SPECIFICATIONS

# PRODUCT SPECIFICATIONS

## Benefits with ALTIPRO™

1. Amino acids that make up the protein in **ALTIPRO™** are **more digestible** than DDG (84.3% vs 77.2%) and within 1.5% of soybean meal digestibility (85.7%).[1]
2. **ALTIPRO™** provides **more energy** for monogastric animals than soybean meal (TMEn, 2642 vs 2395 kcal/kg).[1]
3. **ALTIPRO™ has improved safety.** No pathogens or anti-nutritional factors as found in meat or soy ingredients.
4. **Better product quality.** Nutrients will not be damaged by high heat processing to control pathogens or anti-nutritional factors.
5. **100% vegetarian** with no added synthetic compounds.
6. **Product flow** is excellent.

**ALTIPRO™** can safely and effectively replace soy, meat by-product meals, and other higher priced ingredients in swine, poultry, dairy, aquaculture, or companion animal diets.

## Yeast

Yeast is a rich source of cell wall polysaccharides, protein, vitamins, and energy providing functional benefits such as improved gut health for animals.

[1]*Hy-line rooster study Univ. Georgia Oct. 2022.*

### Amino Acid and Energy Digestibility

| Amino Acid | 93.7 DM (%) | Average Digestibility (%) |
|---|---|---|
| Cysteine | 1.01 | 0.77 |
| Methionine | 1.15 | 0.90 |
| Lysine | 1.92 | 0.79 |
| Alanine | 3.68 | 0.88 |
| Aspartic Acid | 3.68 | 0.82 |
| Glutamic Acid | 8.76 | 0.91 |
| Glycine | 1.94 | 0.55 |
| Isoleucine | 2.27 | 0.84 |
| Leucine | 6.35 | 0.91 |
| Proline | 4.11 | 0.89 |
| Threonine | 2.04 | 0.80 |
| Valine | 2.77 | 0.85 |
| Arginine | 2.30 | 0.90 |
| Histidine | 1.37 | 0.86 |
| Phenylalanine | 2.76 | 0.88 |
| Serine | 2.48 | 0.86 |
| Tyrosine | 2.17 | 0.90 |
| Tryptophan | 0.43 | 0.87 |
| GE | 5215 kcal/kg | |
| TME (poultry) | 2642 kcal/kg | |

### Micro-Nutrients and Yeast Data

| | | |
|---|---|---|
| Calcium | % | 0.04 |
| Sodium | % | 0.03 |
| Potassium | % | 0.25 |
| Magnesium | % | 0.10 |
| Sulfur | % | 0.55 |
| Phosphorus | % | 0.37 |
| Copper | mg/kg | 5.6 |
| Manganese | mg/kg | 5.1 |
| Zinc | mg/kg | 54 |
| Carotenoids | µg/g | 53 |
| Zeaxanthins | µg/g | 21.2 |
| Lutein | µg/g | 18.1 |
| Yeast | % | 30 - 33 |
| Mannans | % | 6 - 7 |

### Physical Characteristics

| | | |
|---|---|---|
| Density | lbs/cu ft | 44 – 45 |
| Flowability: angle of repose* | | 30 –35 |

*Efficient flow below 40

ALTIPRO™