

x·soy200

Micronized Soy Protein Concentrate

Selecta®



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X-SOY200™ is a micronized Selecta's Soy Protein Concentrate produced through aqueous alcohol extraction of defatted soy flakes. This process removes the soluble carbohydrates, trypsin inhibitors, glycinin, B-conglycinin, saponins, and oligosaccharides that are considered to be allergenic and anti-nutritional factors (ANF's) in soybeans. It is produced by a special process that optimizes surface area to volume ratio, without any damages in protein and amino acids quality. Typical particle size of 180 microns.

IN COMPARISON OF MILK, DAIRY PRODUCTS, BLOOD PLASMA, AND OTHERS ANIMAL PROTEIN SOURCES X-SOY 200 HAS:



TYPICAL PROFILE

Chemical Composition (as fed basis)

Crude Protein (min)	60%
Moisture (max)	10%
Crude Fat (max)	2%
Crude Fiber (max)	5%
Ash (max)	7%

Energy

Gross Energy	4,529 kcal/kg
D. E. Swine	3,985 kcal/kg
M.E. Swine	3,704 kcal/kg

Protein Digestibility Coefficient

Swine - SID	95.5%
Shrimp - In vitro Digestibility	89.3%

Particle Size

95% of particles are less than	180 microns
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Amino acids

Amino acids	Total %	Coefficient of Digestibility, %	Digestible AA %
Lysine	4.03	92.74	3.74
Methionine	0.85	91.03	0.77
Threonine	2.49	90.87	2.26
Tryptophan	0.88	94.52	0.83
Arginine	4.65	97.77	4.55
Valine	3.22	91.49	2.95

Anti-nutritional Factors

Trypsin Inhibitor Activity	1.0 mg/g
Glycinin	0.40 mg/kg
Beta-Conglycinin	0.30 mg/kg
Raffinose	< 0.1%
Stachyose	< 0.1%

Biological Analysis

Salmonella	Absent /25g
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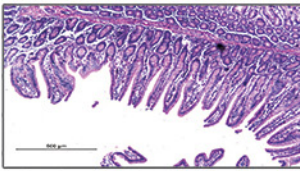


Nutritional Benefits

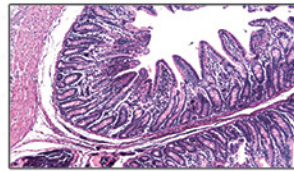
DUE TO THE REDUCED PARTICLE SIZE, X•SOY 200™ IS AN IDEAL INGREDIENT FOR YOUNG ANIMALS. SPECIALLY FINGERLINGS, PIGLETS AND SHRIMP DIETS

X•SOY 200™ better intestinal integrity in piglets

Photomicrographs of jejunum's piglets at 63 days of age showing the beneficial effects on intestinal mucosa. Villi Height in piglets fed X•SOY in replacement of Soybean meal at nursery phase.¹



9% X•SOY DIET



0% X•SOY DIET

¹ Resende et al. Effects of spray-dried plasma replacement for soy protein concentrate on growth performance of weaned pigs. Journal of Animal Science, v. 91 Supl. 2, p.582, 2013.

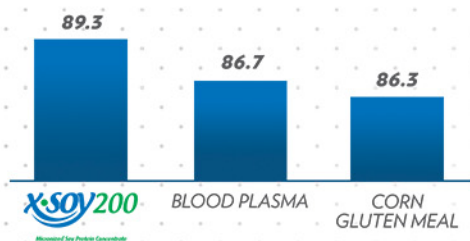
² STEIN, H.H. Selecta Technical Report - University of Illinois, 2015.



X•SOY 200™ BEST OPTION FOR SHRIMP DIETS

Apparent digestibility of protein shrimp, %

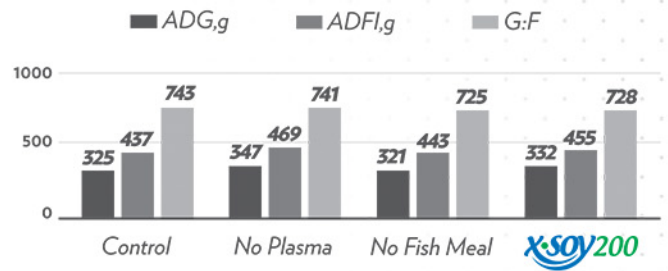
X•SOY has high protein content, high digestibility and it is free of antinutritional factors.



¹ Request full text: x-soy@selecta.com.br

X•SOY replaces blood plasma & fish meal without damages on performance²

GROWTH PERFORMANCE



DIETS:

Control - 5% Fish meal + 5% blood plasma + 0% X•SOY 200™

No Plasma - 5% Fish meal + 0% Blood plasma + 8% X•SOY 200™

No Fish Meal - 0% Fish meal + 5% Blood plasma + 5.25% X•SOY 200™

X•SOY 200™ - 0% Fish meal + 0% Blood plasma + 13.25% X•SOY 200™

ADG - Average daily gain (P> 0.593)

ADFI - Average daily food intake (P>0.453)

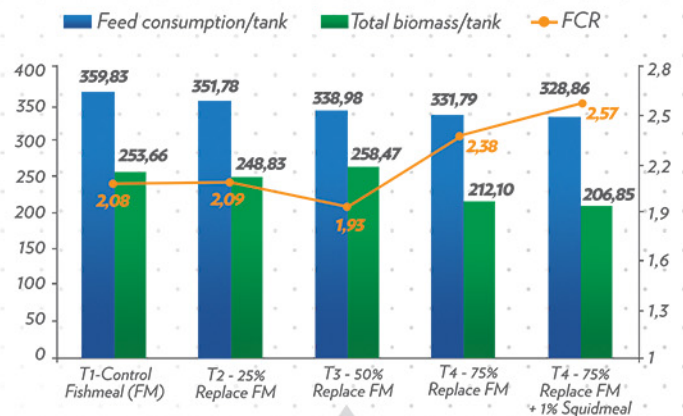
G:F - Gain to feed ratio (P>0.893)

Nutritional test-fishmeal replacement by X•SOY 200™ in shrimp diets

A 50% fishmeal replacement by X•SOY in Litopenaeus Vannamei commercial diets showed very positive results.

X•SOY is available all year long, at steady quality, it can help shrimp feed manufacturers reducing their fishmeal dependency.

TOTAL BIOMASS FEED, CONSUMPTION AND FEED COVERTION RATE (FCR)



Best Diet

7% Better FCA, 6% Less Feed Consumption
2% Better Weight Gain

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