

**Corn Plus Coop
Winnebago, Minnesota**

IOWA TESTING LAB REPORT NO: 04-000542
DATE: 1/27/2004
REC'D DATE: 1/19/2004
METHOD: AOAC; ICP; MOD/AOAC

PROXIMATE ANALYSIS, CALCULATED DE, ME AND NE VALUES FOR SWINE, AND MINERAL AND AMINO ACID CONTENT OF DDGS.¹

Proximate Analysis:

Dry Matter (%)	Crude Protein (%)	Crude Fat (%)	AH Fat (%)	Crude Fiber (%)	Ash (%)	Nitrogen Free Extract (%)	Carbohydrates (%)	Acid Detergent Fiber (%)	Total Digestible Nutrients (%)	Digestible Energy ² (kcal/kg)	Metabolizable Energy ² (kcal/kg)	Net Energy ³ (kcal/kg)
90.20	31.60	11.22	ND ⁴	6.09	6.94	44.16	50.24	10.92	86.97	4068	3810	2178

Mineral Analysis:

Calcium (%)	Phosphorus (%)	Potassium (%)	Magnesium (%)	Sulfur (%)	Sodium (%)	Chloride (%)	Zinc (ppm)	Manganese (ppm)	Copper (ppm)	Iron (ppm)
0.08	0.80	1.03	0.33	0.85	0.10	0.16	42	16	4	116

Amino Acid Analysis:

Arginine (%)	Histidine (%)	Isoleucine (%)	Leucine (%)	Lysine (%)	Methionine (%)	Cystine (%)	Phenylalanine (%)	Threonine (%)	Tryptophan (%)	Valine (%)
1.37	0.88	1.25	3.69	0.95	0.61	0.70	1.56	1.20	0.25	1.72

¹ Nutrient values expressed on 100% dry matter basis.

² DE (for swine) = 4,151 – (122 x % Ash) + (23 x %CP) + (38 x %Fat) – (64 x %Crude Fiber); ME (for swine) = DE x [1.003 - (0.0021 x %CP)], Noblet and Perez (1993).

³ NE (for swine) = 328 + (0.599 x ME) – (15 x %Ash) – (30 x %ADF), Ewan (1989).

⁴ ND = not determined.

APPARENT AND STANDARDIZED TRUE ILEAL DIGESTIBILITY OF CRUDE PROTEIN AND AMINO ACIDS OF DDGS FOR SWINE (100% DRY MATTER BASIS).

	DM	CP	Agr	His	Ile	Leu	Lys	Met	Phe	Thr	Trp	Val	Ala	Asp	Cys	Glu	Gly	Pro	Ser
TOTAL, %	88.5	32.7	1.31	0.77	1.23	4.19	0.92	0.64	1.73	1.25	0.25	1.58	2.45	2.11	0.61	5.75	1.14	2.84	1.65
AID¹, %		67.01	75.41	81.42	80.36	84.53	73.51	87.46	83.55	71.46	62.97	77.49	78.33	68.70	77.33	84.70	40.89	13.60	76.34
A DIG², %		26.52	0.24	1.54	1.34	1.19	0.88	0.60	0.86	1.05	0.15	3.43	2.38	1.98	0.52	2.19	0.76	0.25	1.18
SID³, %		76.40	82.80	84.40	83.34	85.97	77.88	89.20	86.96	77.47	71.83	80.74	81.78	74.32	81.24	87.03	66.06	55.29	81.80
S DIG⁴, %		30.24	0.27	1.60	1.39	1.21	0.94	0.62	0.89	1.14	0.17	3.58	2.48	2.14	0.55	2.25	1.23	1.02	1.26

	NDF, %	ADF, %	ADICP ⁵ , %	Mean particle size, µm	Soluble CP, %	Ash, %	Bulk density, lbs/ft3	pH
OTHER	32.94	13.43	5.59	680.36	30.60	1.75	24.05	3.60

¹ AID = Apparent Ileal Digestibility

² A DIG = Apparent Ileal Digestible CP & Amino Acids

³ SID = Standardized True Ileal Digestibility

⁴ S DIG = Standardized True Ileal Digestible CP & Amino Acids

⁵ ADICP = Acid Detergent Insoluble Crude Protein



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