

How Does Extrusion Compare Against Other Cooking Processes?

(NCR Values) Soybean product composition

ITEM	SBM (44)	SBM (48)	FFSB	INSTA-PRO DEWS*	DEES**
DM, %	89.0	90.0	90.0	93.0	90.0
Protein, %	44.0	47.5	37.0	38.0	45.0
ME Poultry, Kcal/kg ¹	2230	2440	3300	4020	3350
ME Swine, kcal/kg ²	3220	3385	3625	4180	3740
NE _L , Mcal/kg ³	1.73	1.81	1.96	2.64	2.27
Fat, %	0.8	1.0	18.0	18.0 (19.5)	6.50 (7.00)
Fiber, %	7.3	3.9	5.5	5.2	5.5
Calcium, %	0.29	0.27	0.25	0.25	0.26
P, %	0.65	0.62	0.58	0.60	0.63
P avail, %	0.29	0.24	0.25	0.25	0.28
S, %	0.33	0.33	0.22	0.22	0.30
Methionine %	0.62	0.67	0.51	0.54	0.70
TSAA, %	1.28	1.39	1.15	1.10	1.35
Lysine, %	2.69	2.96	2.40	2.40	2.75
Tryptophan, %	0.74	0.74	0.55	0.59	0.74
Threonine, %	1.72	1.87	1.50	1.52	1.80
Isoleucine, %	1.96	2.12	2.00	1.72	2.00

1 NRC Poultry (1994), "as fed" basis; () By Acid Hydrolysis

2 NRC Swine 9 1988), "as fed" basis *DEWS = Dry Extruded Whole Soybeans

3 NRC Dairy (1989), "as fed" basis **DEES = Dry Extruded Expelled Soybean Meal