

Typical Nutrient Composition of Common Feed Ingredients 1

	DM	CP	UIP	TDN	NE-1	ADF	NDF	NFC	Ca	P	Mg	K	S	EE
Feed Ingredient	%	%	CP%	%	Mcal/lb	%	%	%	%	%	%	%	%	%
Composition Expressed on a 100% Dry Matter Basis														
Alfalfa, Dehy. 17% CP	92	18.9	55	61	0.63	35	45	22.5	1.52	0.25	0.32	2.6	0.24	3.0
Barley	88	13.5	27	84	0.88	7	19	62.8	0.05	0.38	0.15	0.47	0.17	2.1
Beet Pulp, w/ Molasses	92	10.1	40	78	0.81	25	44	39.2	0.61	0.10	0.16	1.78	0.42	0.6
Blood Meal	92	87.2	80	66	0.68	----	---	----	0.32	0.26	0.24	0.10	0.37	1.4
Brewers Grains, Dehy.	92	25.4	50	71	0.74	24	46	17.3	0.33	0.55	0.16	0.09	0.32	6.5
Brewers Grains, Wet	21	25.4	45	78	0.81	23	42	21.3	0.33	0.55	0.16	0.09	0.32	6.5
Canola Meal	92	44.0	28	75	0.78	18	36	11.0	0.73	1.13	0.58	1.36	1.25	1.2
Corn, Ear	87	9.0	50	83	0.87	11	25	60.4	0.07	0.27	0.14	0.53	0.16	3.7
Corn, Ear, High Moist.	68	9.0	45	85	0.89	11	25	60.4	0.07	0.27	0.14	0.53	0.16	3.7
Corn, Shelled	88	10.0	50	85	0.89	3	9	75.1	0.03	0.30	0.14	0.37	0.12	4.3
Corn, Shelled, High Moist.	72	10.0	45	88	0.93	3	9	75.1	0.03	0.30	0.14	0.37	0.12	4.3
Corn Gluten Feed	90	25.6	30	83	0.87	12	45	19.5	0.36	0.82	0.36	0.64	0.23	2.4
Corn Gluten Meal, 60% CP	90	67.2	55	89	1.00	5	14	14.6	0.08	0.54	0.09	0.21	0.72	2.4
Corn Gluten Meal, 40% CP	91	46.8	55	86	0.96	9	37	10.4	0.16	0.50	0.06	0.03	0.39	2.4
Cottonseed Hulls	91	4.1	35	45	0.45	73	90	1.4	0.15	0.09	0.14	0.87	0.09	1.7
Cottonseeds, w/Lint	92	23.0	35	96	1.01	34	44	8.2	0.21	0.64	0.46	1.0	0.26	20.0
Cottonseeds, w/o Lint	90	25.0	35	98	1.03	26	37	9.7	0.12	0.54	0.41	1.18	0.26	23.8
Cottonseed Meal, 41%	91	45.6	43	76	0.79	19	26	20.1	0.22	1.21	0.55	1.39	0.34	1.3
Distillers Dried Grains	93	25.0	55	88	0.93	18	44	15.9	0.15	0.71	0.18	0.44	0.33	10.3
Fat 2	99	---	---	177	2.65	---	---	---	---	---	---	---	---	---
Feather Meal, Hydrolyzed	93	90.0	70	69	0.70	---	---	---	0.22	0.8	0.22	0.3	1.7	3.8
Fish Meal, Menhaden	92	66.7	65	73	0.76	---	---	---	5.65	3.16	0.16	0.76	0.49	10.5
Hominy Feed	90	11.5	55	87	0.91	13	25	53.0	0.05	0.57	0.26	0.65	0.03	7.7
Linseed Meal, Solv	90	38.3	35	78	0.81	19	25	28.7	0.043	0.89	0.66	1.53	0.43	1.5
Malt Sprouts	94	28.1	40	71	0.76	18	47	16.5	0.23	0.75	0.2	0.23	0.85	1.4
Meat and Bone Meal	93	54.1	50	71	0.74	---	---	---	11.10	5.48	1.09	1.43	0.27	10.4
Molasses, Cane	75	5.8	---	72	0.75	---	---	86.0	1.00	0.11	0.43	3.84	0.47	0.1
Oats	89	13.3	20	77	0.80	16	32	45.9	0.07	0.38	0.14	0.44	0.23	5.4
Peanut Hulls	91	7.8	25	22	0.19	65	74	12.0	0.26	0.07	0.17	0.95	0.10	2.0
Peanut Meal, Solv.	92	52.3	25	77	0.80	6	14	26.0	0.29	0.68	0.17	1.23	0.33	1.4
Poultry Byproduct Meal	93	62.8	50	79	0.83	---	---	---	3.76	1.96	0.19	0.42	0.56	14.1
Rye	88	13.8	20	84	0.88	4	10	72.6	0.07	0.37	0.14	0.52	0.17	1.7
Soybean Hulls	91	12.1	30	77	0.80	50	67	13.7	0.49	0.21	0.28	1.27	0.09	2.1
Soybeans, Raw	90	42.8	25	91	0.96	10	15	17.9	0.28	0.66	0.29	1.82	0.24	18.8
Soybeans, Heated	92	42.2	50	94	0.99	10	15	17.7	0.28	0.66	0.23	1.89	0.24	20.0
Soybean Meal, 44% CP Solv.	89	49.9	35	84	0.88	10	15	26.3	0.3	0.68	0.3	1.98	0.37	1.5
Soybean Meal, 44% CP Exp.	90	47.7	55	85	0.89	10	15	25.3	0.29	0.69	0.28	1.98	0.37	5.3
Soybean Meal, 48% CP Solv.	90	55.1	35	87	0.91	6	8	29.4	0.29	0.7	0.32	2.3	0.48	1.0
Sunflower Meal, w/o Hulls	93	49.8	26	65	0.67	15	25	14.0	0.44	0.98	0.77	1.14	0.33	3.1
Sunflower Meal, w/ Hulls	90	25.9	26	57	0.60	33	40	26.6	0.23	1.03	0.75	1.06	0.33	1.2
Triticale	90	17.6	20	84	0.88	8	15	63.7	0.06	0.33	0.2	0.4	0.17	1.7
Wheat	89	16.0	22	88	0.93	8	15	65.1	0.04	0.42	0.16	0.42	0.18	2.0
Wheat Bran	89	17.1	29	70	0.73	15	51	20.6	0.13	1.38	0.6	1.56	0.25	4.4
Wheat Middlings	89	18.4	25	78	0.80	10	37	34.5	0.13	0.99	0.4	1.13	0.2	4.9
Whey, Fresh	7	14.2	---	81	0.85	---	---	75.3	0.92	0.82	0.14	2.75	1.12	0.7

1 Adapted from 1989 NRC Dairy. DM = Dry Matter. CP = Crude Protein. UIP-CP = Undergradable or bypass protein as % of CP. TDN = Total Digestible Nutrients. NE1 = Net Energy of Lactation. ADF = Acid Detergent Fiber. NDF = Neutral Detergent Fiber. NFC = Nonfiber Carbohydrate. Ca = Calcium. P = Phosphorus. Mg = Magnesium. K = Potassium. S = Sulfur. EE= Ether Extract.

2 TDN and NE1 values for fat listed in 1988 NRC Dairy. More research is needed to better define these values. The TDN value assigned to fat is conservative relative to the NE1 value