

Feed Composition Table

This bulletin is a table of typical feed ingredients. It is not meant to be all inclusive, but to show how feedstuffs can vary, and to give an estimate of feed composition. The goal of a feed analysis table is to be able to predict how the animals will respond when fed certain feeds.

All feedstuffs are not “typical”. There is variation even in common ingredients. Feed should be analyzed whenever practical and possible. When there is not time or if an ingredient is difficult to analyze, the analysis table should be used as a guide.

Table 1. Typical Feed Composition for Dairy Cattle

(All values are shown on a Dry Matter Basis)

Feedstuff	Protein				Fat & Energy					Minerals				
	DM	% CP	% UIP	% SIP	% Fat	% ADF	% NDF	Mcal NEL	% TDN	% Ca	% P	% K	% Mg	% S
14% Baled Hay	88	14	36	29	2.0	41	53	0.54	53	.90	0.27	2.20	0.28	0.21
16% Baled Hay	88	16	35	31	2.2	38	50	0.58	57	1.00	0.29	2.30	0.30	0.21
18% Baled Hay	87	18	34	33	2.5	35	47	0.61	60	1.10	0.29	2.30	0.30	0.21
20% Baled Hay	87	20	32	34	2.5	32	44	0.65	64	1.20	0.31	2.60	0.34	0.22
22% Baled Hay	87	22	31	36	2.5	30	41	0.66	65	1.30	0.32	2.80	0.36	0.23
15% Haylage <40% DM	38	15	24	54	2.0	40	51.5	0.55	54	1.05	0.30	2.40	0.34	0.21
15% Haylage	50	15	27	48	2.0	40	51.5	0.55	54	1.05	0.30	2.40	0.34	0.21
15% Haylage >50% DM	55	15	29	40	2.0	40	51.5	0.55	54	1.05	0.30	2.40	0.34	0.18
18% Haylage <40% DM	38	18	22	56	2.0	35	47	0.61	60	1.20	0.33	2.70	0.36	0.21
18% Haylage	50	18	25	50	2.0	35	47	0.61	60	1.20	0.33	2.70	0.36	0.21
18% Haylage >50% DM	55	18	27	44	2.0	35	47	0.61	60	1.20	0.33	2.70	0.36	0.20
21% Haylage <40% DM	38	21	20	60	2.0	31	42.5	0.66	65	1.35	0.34	2.90	0.37	0.24
21% Haylage	50	21	23	54	2.0	31	42.5	0.66	65	1.35	0.34	2.90	0.37	0.24
21% Haylage >50% DM	55	21	25	48	2.0	31	42.5	0.66	65	1.35	0.34	2.90	0.37	0.24
Barley Silage	40	15	26	50	2.0	37	58	0.63	61	0.38	0.30	1.63	0.13	0.13
Corn Silage - High Grain	38	8.3	30	35	3.3	23	45	0.71	69	0.30	0.25	1.00	0.20	0.11
Corn Silage - Avg. Grain	38	8.3	30	35	3.0	27	49	0.66	66	0.30	0.25	1.00	0.20	0.11
Corn Stalkage	52	6.6	45	15	1.3	40	70	0.55	54	0.50	0.10	0.92	0.33	0.17
Green Chop Avg.	22	16	20	40	2.0	38	50	0.58	57	1.10	0.31	2.50	0.34	0.23
Mileage	40	12	24	45	1.4	37	57	0.62	60	0.80	0.40	2.60	0.34	0.23
Oatlage	38	12	25	45	4.0	35	54	0.60	58	0.37	0.26	2.40	0.21	0.24
Peas/Oatlage Mix	38	16	25	50	3.7	33	54	0.61	59	0.79	0.24	1.90	0.24	0.24
Rye Silage	40	15	25	45	3.3	39	59	0.60	59	0.38	0.38	1.00	0.33	0.15
Sorghum - Sudan Silage	40	11	32	45	2.8	42	57	0.56	55	0.45	0.20	2.20	0.45	0.05
Sweet Corn Silage	21	10	27	55	2.0	37	67	0.59	63	0.43	0.33	2.05	0.24	0.10
Ground Ear Corn	87	8.8	50	16	3.7	9	24	0.86	83	0.07	0.29	0.49	0.13	0.09
Ground Shelled Corn	88	9.1	50	11	4.1	3.4	9	0.90	87	0.03	0.28	0.43	0.13	0.11
High Moisture Ear Corn	70	9	40	35	3.7	9	19	0.88	85	0.09	0.29	0.50	0.13	0.10
High Moisture Shelled Corn	73	9.9	40	30	4.3	3	9	0.91	88	0.03	0.32	0.44	0.12	0.11



Feedstuff	Protein				Fat & Energy					Minerals				
	DM	% CP	% UIP	% SIP	% Fat	% ADF	% NDF	Mcal NEL	% TDN	% Ca	% P	% K	% Mg	% S
Corn Gluten Feed	90	20	28	45	2.8	11	41	0.86	83	0.24	1.00	1.30	0.47	0.56
Barley	91	13.5	27	22	2.0	6.2	19	0.88	84	0.07	0.39	0.63	0.13	0.17
Oats	89	13	20	28	4.0	17	32	0.80	77	0.11	0.43	0.60	0.16	0.21
Hominy	87	12	50	19	6.7	10.5	30	0.96	93.5	0.05	0.58	0.58	0.23	0.12
Milo	88	11	50	9	3.2	5	18	0.86	82	0.03	0.31	0.39	0.15	0.10
Rye	89	13	20	16	1.8	3.5	10	0.88	84	0.07	0.34	0.51	0.14	0.17
Wheat	91	15	22	32	2.1	3.6	13	0.92	89	0.06	0.43	0.43	0.17	0.17

(All values are shown on a Dry Matter Basis. Bottom row values are shown as an As Fed Basis)

Blood Meal	95	90	80	10	1.3	0.5	0.5	0.65	64	0.21	0.26	0.21	0.11	0.37
	95	85	80	10	1.2	0.5	0.5	0.62	61	0.20	0.25	0.20	0.10	0.35
Meat & Bone Meal	94	54	50	15	12.5	4	4	0.74	71	9.2	4.81	0.54	0.27	0.54
	95	51	50	15	3.6	3.6	6	0.69	66	9.4	4.10	0.50	0.25	0.50
Feather Meal	92	91	70	10	5.4	0.5	0.5	0.71	69	0.43	0.36	0.34	0.22	1.63
	91	84	70	10	5.0	0.5	0.5	0.65	63	0.40	0.33	0.31	0.20	1.5
Fish Meal	90	70	65	9.5	9.5	0	0	0.78	71	5.2	3.33	1.22	0.22	0.50
	91	63	65	16	9.0	0	0	0.70	64	4.6	3.0	1.1	0.20	0.45
Fuzzy Cottonseed	91	22	35	24	17.8	41	52	0.98	95	0.14	0.56	1.14	0.35	0.20
	91	20	35	24	16.2	33	41	0.89	86	0.13	0.51	1.04	0.32	0.18
Brewers Grain, Wet	24	27	45	10	6.5	23	42	0.79	77	0.33	0.58	0.17	0.21	0.33
	24	6	45	10	1.6	5.5	10	0.19	18	0.08	0.14	0.04	0.05	0.08
Corn Gluten Meal, 60%	90	69	55	4	1.1	4.4	14	0.94	89	0.01	0.50	0.39	0.11	0.72
	90	61	55	4	1.0	4	13	0.85	80	0.01	0.45	0.35	0.10	0.65
Distillers Grain	92	27	55	14	8.7	18	44	0.88	85	0.26	0.76	1.02	0.33	0.44
	92	25	55	14	8.0	17	41	0.81	78	0.28	0.80	0.94	0.30	0.40
Malt Sprouts	92	28	37	6	1.1	14.1	43.5	0.76	73	0.24	0.75	0.23	0.20	0.70
	92	25	37	6	1.5	17	46	0.67	65	0.22	0.69	0.21	0.18	0.64
Sunflower Meal	93	49.8	25	30	2.5	14	21.5	0.67	65	0.42	0.95	1.10	0.29	0.32
	93	46	25	30	2.3	13	20	0.62	60	0.39	0.88	1.02	0.27	0.27
Wheat Midds	89	19	21	33	4.5	15	37	0.71	69	0.17	1.12	0.67	0.33	0.23
	89	17	21	33	4.0	13	33	0.63	61	0.15	1.0	0.60	0.29	0.20
Soy Hulls	91	13	40	31	3.3	50	67	0.80	77	0.39	0.39	1.20	0.11	0.11
	91	12	40	31	3.0	46	61	0.73	70	0.35	0.35	1.09	0.10	0.10
44% Soybean Meal	90	49	35	18	1.4	9	14	0.87	84	0.41	0.67	2.46	0.31	0.42
	90	44	35	18	1.3	8	12.6	0.78	76	0.37	0.60	2.21	0.28	0.38
Vita-Soy®	93	42	60	10	23.1	8.6	13	1.03	97	0.26	0.65	1.88	0.26	0.24
	93	40	60	10	21.5	8	13	0.96	91	0.24	0.60	1.7	0.24	0.22
Extruded Soybeans	93	41	52	15	19.9	10.2	16	1.00	95	0.27	0.65	1.77	0.27	0.24
	93	38	52	15	18.5	10	15	0.93	88	0.25	0.60	1.65	0.25	0.22
Raw Soybeans	89	42	26	30	20.2	10	16	0.96	91	0.28	0.67	1.85	0.28	0.25
	89	38	26	30	18.0	9	14	0.85	81	0.25	0.60	1.65	0.25	0.22
Linseed Meal	90	38	35	40	1.4	17	25	0.79	77	0.44	0.89	1.44	0.64	0.43
	90	34	35	40		15	23	0.71	69	0.40	0.80	1.30	0.58	0.39
Urea	98	292												
	100	287												

