



Nutritional Composition of Feedstuffs for Beef Cattle

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These typical nutritional values are based on 1982-84 National Research Council publications and recent beef cattle research reports, and will most accurately represent animal utilization when the feedstuffs are used in roughage-based rations for beef cows and growing cattle.

Since growing, harvesting and storage conditions can markedly influence the nutritional content of feeds, actual feed analysis of the feedstuffs to be used can help in fine-tuning rations.

Please see table starting on page 2.

	% Dry Matter	% Crude Protein	% TDN	NEm Mcal/lb	NEg Mcal/lb	% Calcium	% Phos.
FEEDSTUFF	----- 100% Dry Matter Basis -----						
• CONCENTRATES:							
Bakery byproduct, dry	91	10.0	92	1.04	.72	.22	.30
Barley, 48-50 lb.	88	13.0	84	.94	.64	.05	.38
Barley, 40 lb.	88	13.4	76	.81	.53	.07	.37
Barley screenings	89	13.1	78	.85	.56	.09	.33
Beet molasses, wet	78	8.5	79	.87	.58	.17	.03
Beet pulp, dehydrated	91	9.7	75	.80	.52	.69	.10
Brewers grains	92	26.9	82	.90	.60	.35	.60
Cane molasses, wet	75	5.8	74	.78	.51	1.00	.11
Corn, ear, ground	87	8.9	82	.90	.60	.07	.27
Corn, shelled	86	10.0	90	1.02	.70	.02	.35
Corn, flaked	80	10.0	95	1.08	.76	.02	.35
Corn, ensiled whole	73	10.0	93	1.06	.74	.02	.35
Corn, ground ensiled	73	10.0	91	1.03	.71	.02	.35
Corn gluten meal	90	67.2	89	1.01	.69	.08	.54
Corn gluten feed, 21%	90	24.0	84	.94	.64	.20	1.00
Cottonseed meal, 41%	90	45.6	78	.85	.56	.20	1.20
Distiller's grains, corn	92	23.0	89	.96	.66	.11	.43
Distiller's solubles, corn	92	29.7	88	.99	.68	.35	1.37
Grain dust	89	10.0	82	.90	.60	.35	.25
Grain sorghum, fine grind	87	10.0	84	.94	.64	.04	.34
Grain sorghum, coarse gr.	87	10.0	81	.89	.59	.04	.34
Gr. sorghum, steam flaked	80	10.0	92	1.05	.73	.04	.34
Gr. sorghum, ensiled whole	72	10.0	92	1.05	.73	.04	.34
Gr. sorghum, ground ensiled	72	10.0	87	.98	.67	.04	.34
Hominy feed	90	11.5	94	1.07	.75	.05	.57
Linseed meal, 34%	90	38.3	78	.85	.56	.43	.89
Millet, proso	90	12.9	83	.93	.63	.03	.34
Oats, 38 lb.	89	13.3	78	.85	.56	.10	.36
Oats, 32 lb.	89	13.4	73	.77	.50	.10	.36
Rye	88	13.8	84	.94	.64	.07	.37
Soybean seeds	92	42.8	91	1.03	.71	.27	.65
Soybean meal, 44%	89	49.9	83	.93	.63	.33	.71
Soybean meal, 48%	90	53.9	87	.98	.67	.29	.70
Soy hulls	91	12.1	77	.84	.55	.49	.21
Sunflower seeds, oil-type	91	19.0	88	.99	.68	.20	.60
Sunflower seeds, confect.	91	23.5	73	.77	.50	.10	.60
Sunflower meal, 28%	90	33.0	63	.64	.38	.23	1.03
Sunflower meal, 42%	90	48.8	73	.77	.50	.44	.98
Tallow or vegetable fat	99	0.0	192	2.34	1.80	.00	.00
Triticale	89	15.5	83	.93	.63	.06	.33
Urea, feed grade, 45% N	99	287.0	0	.00	.00	.00	.00
Wheat, hard red	88	14.0	88	.99	.68	.05	.43
Wheat, soft red	88	14.0	88	.99	.68	.05	.43
Wheat, soft white	89	11.0	89	1.00	.69	.07	.35
Wheat, red, steam flaked	82	14.0	92	1.05	.73	.05	.43
Wheat middlings	89	18.4	78	.85	.56	.13	.99
Wheat screenings	89	15.8	71	.75	.48	.15	.39

	% Dry Matter	% Crude Protein	% TDN	NEM Mcal/ib	NEg Mcal/lb	% Calcium	% Phos.
FEEDSTUFF	----- 100% Dry Matter Basis -----						
• ROUGHAGES:							
Alfalfa dehy, 15% protein	92	16.5	59	.59	.33	1.32	.24
Alfalfa dehy, 17% protein	92	18.9	61	.61	.35	1.52	.25
Alfalfa dehy, 20% protein	92	22.4	63	.64	.38	1.93	.30
Alfalfa hay, bud	88	20.0	61	.61	.35	1.70	.28
Alfalfa hay, early bloom	88	18.0	58	.58	.32	1.41	.22
Alfalfa hay, mid-bloom	88	16.0	56	.54	.28	1.31	.21
Alfalfa hay, late bloom	88	14.0	52	.47	.22	1.13	.18
Alfalfa haylage, early bloom	35	19.0	59	.59	.33	1.65	.26
Alfalfa/grass hay, early blm.	89	14.5	57	.56	.30	.85	.26
Alfalfa/grass pasture, veget.	25	18.5	67	.69	.43	1.52	.36
Barley silage, soft dough	35	10.0	69	.72	.45	.34	.28
Barley straw	89	4.3	40	.28	.04	.25	.07
Bluestem pasture, veget.	28	11.0	65	.67	.41	.55	.20
Bluestem pasture, dormant	80	4.0	43	.32	.08	.35	.10
Brome hay, pre-bloom	88	16.0	58	.58	.32	.32	.28
Brome hay, late bloom	89	10.0	54	.51	.25	.30	.26
Brome hay, mature	90	6.0	50	.44	.19	.26	.18
Buffalograss, vegetative	26	13.0	66	.68	.42	.57	.21
Buffalograss, dormant	80	5.5	46	.37	.12	.34	.12
Clover hay, mid-bloom	89	15.0	55	.52	.26	1.23	.22
Corn cobs	90	3.2	50	.44	.19	.12	.04
Corn stalks, early grazing	65	6.5	52	.47	.22	.58	.18
Corn stalks, late grazing	85	3.5	44	.34	.10	.42	.10
Corn stover, baled	87	5.2	49	.42	.17	.50	.13
Corn silage, droughty	30	9.3	64	.66	.40	.34	.19
Corn silage, well-eared	33	8.1	70	.74	.47	.23	.22
Corn screenings	89	10.0	85	.95	.65	.04	.32
Cottonseed hulls	91	4.1	42	.31	.07	.15	.09
Fescue hay, late bloom	88	7.5	53	.48	.23	.30	.26
Fescue, early winter, with N	35	11.0	54	.51	.25	.35	.30
Fescue, winter, no nitrogen	50	6.5	48	.41	.16	.30	.25
Gamma pasture, vegetative	27	11.5	66	.68	.42	.50	.20
Gamma pasture, dormant	80	5.0	46	.37	.12	.34	.12
Kochia hay	89	11.0	50	.44	.19	1.50	.25
Oats hay, full bloom	88	10.0	56	.55	.29	.34	.24
Oats silage, soft dough	35	9.6	57	.57	.31	.34	.24
Oats straw	90	4.4	44	.34	.10	.24	.06
Prairie hay, early bloom	90	9.0	55	.52	.26	.47	.19
Prairie hay, late bloom	90	5.8	51	.45	.20	.43	.15
Sorghum silage, head chop	67	11.1	76	.83	.54	.13	.27
Sorgh. silage, grain type	38	9.5	66	.68	.42	.35	.24
Sorgh. silage, forage, high grain	32	7.8	63	.64	.38	.40	.23
Sorgh. silage, forage, med. grain	29	7.2	60	.60	.34	.45	.21
Sorgh. silage, forage, low grain	26	6.2	56	.54	.28	.50	.19
Sorghum, forage (cane) hay	87	7.0	54	.50	.24	.45	.22

	% Dry Matter	% Crude Protein	% TDN	NEm Mcal/lb	NEg Mcal/lb	% Calcium	% Phos.
FEEDSTUFF	----- 100% Dry Matter Basis -----						
• ROUGHAGES, continued:							
Sorghum-sudan pasture	22	14.0	61	.61	.35	.43	.28
Sorghum-sudan hay	87	10.0	56	.53	.27	.46	.21
Sorghum-sudan silage	30	10.0	56	.54	.28	.46	.21
Sorghum stubble, early graze	55	7.5	52	.47	.22	.55	.18
Sorghum stubble, late graze	75	4.0	46	.37	.12	.40	.12
Sorghum stover, baled	86	6.0	49	.42	.17	.45	.14
Soybean hay, mid-bloom	89	16.0	54	.50	.24	1.26	.27
Sweet clover hay, mid-bloom	87	13.0	54	.50	.24	1.27	.25
Triticale silage, soft dough	35	9.5	56	.55	.29	.34	.25
Wheat hay, soft dough	88	8.5	58	.58	.32	.32	.22
Wheat silage, soft dough	35	9.0	62	.63	.37	.33	.25
Wheat straw	90	4.0	41	.29	.05	.18	.05
Wheat straw, ammoniated	90	9.0	50	.43	.18	.18	.05
Wheat pasture	20	28.0	70	.73	.46	.30	.25
Wheat grass, western, hay	88	9.0	54	.51	.25	.30	.20
Wheat grass, crested, hay	88	9.8	54	.50	.24	.33	.21
• MINERALS:							
Bone meal, steamed	97	8.4	0.0	0.0	0.0	31.5	14.2
Dicalcium phosphate	97	0.0	0.0	0.0	0.0	22.0	19.3
Monocalcium phosphate	97	0.0	0.0	0.0	0.0	16.4	21.6
Ground limestone	100	0.0	0.0	0.0	0.0	34.0	0.0
Monosodium phosphate	97	0.0	0.0	0.0	0.0	0.0	22.5
Rock phosphate, defluorinated	100	0.0	0.0	0.0	0.0	32.0	18.0

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