

Oklahoma Cooperative Extension Service
Typical Feeds and Forages Composition

Updated: Oct-07

Dr. David Lalman
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Feed No.	Type of feed	Dry Matter %	Dry Matter Basis														
			NDF %	eNDF % of NDF	CP %	DIP % of CP	TDN %	NE _m Mcal/cwt	NE _g Mcal/cwt	EE %	Ca %	P %	K %	S %	Cu ppm	Mn ppm	Zn ppm
Roughage																	
1	Alfalfa Hay, early bloom	90	39	92	25	88	60	59	33	2.5	1.41	0.22	2.51	0.30	13	36	30
2	Alfalfa Hay, mid bloom	90	47	92	22	84	58	56	31	2.6	1.37	0.22	1.56	0.28	11	28	31
3	Alfalfa Hay, full bloom	90	49	92	17	82	55	52	26	2.3	1.19	0.24	1.56	0.27	10	28	26
4	Alfalfa Cubes	91	46	40	18	70	57	55	29	2.0	1.30	0.23	1.90	0.35	9	32	18
5	Alfalfa, Dehydrated 17% CP	92	45	6	19	41	61	61	35	3.0	1.42	0.25	2.50	0.24	9	34	21
6	Bermuda Hay, vegetative	90	69	80	15	80	57	55	29	2.3	0.59	0.28	1.90	0.30	12	170	36
7	Bermuda Hay, early bloom	90	75	90	10	72	53	49	24	1.9	0.51	0.20	1.60	0.25	8	140	31
8	Bermuda Hay, full bloom	90	79	98	8	68	47	39	15	1.8	0.43	0.18	1.40	0.21	8	110	26
9	Corn silage	35	46	70	8	72	72	77	49	3.1	0.28	0.23	1.10	0.12	4	24	22
10	Cotton Seed Hulls	90	87	100	4	55	45	45	3	1.9	0.15	0.09	1.10	0.05	13	119	10
11	Fescue Hay, early bloom	87	68	98	13	72	57	55	29	4.8	0.45	0.37	2.50	0.21	11	200	34
12	Fescue Hay, full bloom	88	73	98	9	68	50	52	16	3.5	0.40	0.26	1.70	0.17	7	100	23
13	Peanut Hulls	91	74	98	8	40	22	36	0	1.5	0.20	0.07	0.90	0.07	11	38	20
14	Prairie Hay	91	73	98	6	63	52	50	12	2.0	0.40	0.15	1.10	0.06	4	59	34
15	Rice hulls	92	81	90	3	45	13	35	0	0.9	0.14	0.07	0.50	0.08	3	320	24
16	Sorghum Silage	32	59	70	9	71	59	58	32	2.7	0.49	0.22	1.72	0.12	9	69	30
17	Sudan Grass Silage	31	64	61	10	72	58	56	31	3.0	0.58	0.27	2.40	0.14	37	99	29
18	Sunflower Seed Hulls	90	73	90	4	35	40	42	0	2.2	0.00	0.11	0.20	0.19			200
19	Wheat Silage	33	62	61	13	79	59	58	32	3.2	0.40	0.28	2.10	0.21	9	80	27
20	Wheat Straw	91	81	98	3	40	42	43	0	1.8	0.16	0.05	1.30	0.17	5	35	6
21	Wheat Straw, ammoniated	85	76	98	9	75	50	50	12	1.5	0.15	0.05	1.30	0.16	5	35	6
Grazed Forage																	
27	Bermuda, vegetative	30	68	80	16	85	65	67	40	3.0	0.46	0.31	1.90	0.33	13	185	32
28	Bermuda, boot stage	35	72	100	13	75	60	59	33	2.7	0.59	0.28	1.90	0.30	12	160	36
29	Bermuda, fall, mature	80	77	100	8	60	48	41	16	2.1	0.26	0.18	1.30	0.21	9	140	20
30	Bermuda, winter, mature	90	80	100	5	55	44	34	10	1.5	0.30	0.15	1.00	0.15	7	45	15
31	Bermuda, stockpiled, Sep.-Oct.	35	70	100	13	70	57	55	29	2.5	0.66	0.24	0.88	0.26	6	151	27
32	Bermuda, stockpiled, Nov.-Dec.	85	74	100	11	65	54	50	25	2.1	0.52	0.22	0.55	0.27	5	117	26
33	Bermuda, stockpiled, Jan.-Feb.	90	77	100	7	60	47	39	15	1.5	0.48	0.18	0.32	0.25	4	116	26
34	Fescue, vegetative	29	60	40	18	80	64	65	39	4.5	0.50	0.40	2.50	0.24	13	175	36
35	Fescue, boot stage	33	65	100	12	75	57	55	29	3.8	0.45	0.30	1.80	0.21	10	150	32
36	Fescue, mature	70	74	100	8	70	49	42	18	3.2	0.38	0.20	1.40	0.18	7	120	26
37	Fescue, stockpiled, Nov.-Dec.	40	72	100	13	75	52	47	22	2.7	0.45	0.30	1.80	0.21	12	150	32
38	Fescue, stockpiled, Jan.-Feb.	60	75	100	11	68	40	27	3	2.2	0.38	0.20	1.40	0.18	7	120	26
39	Native range, April-June	30	68	100	14	75	70	74	47	3.2	0.30	0.20	1.60	0.15	11		
40	Native range, July-August	35	71	100	10	70	64	65	39	3.0	0.33	0.15	1.50				
41	Native range, Sept-Oct	46	75	100	7	65	59	58	32	2.5	0.28	0.12	1.10				
42	Native range, Nov.-Dec.	75	78	100	5	65	55	52	26	2.2	0.25	0.09	0.80				
43	Native range, Jan.-March	85	80	100	4	55	49	42	18	1.7	0.23	0.07	0.60				
44	Wheat Forage, vegetative	21	50	41	22	84	71	76	48	4.0	0.35	0.36	3.10	0.22	10	85	35

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Byproduct Feeds																	
47	Barley Malt Pellets with Hulls	90	50	34	18	64	68	71	44	1.9	0.21	0.59	1.20	0.32	10	44	61
48	Corn Gluten Feed	90	40	36	24	75	80	88	59	3.2	0.14	1.07	1.50	0.53	7	22	67
49	Distillers Grains with Solubles, corn	89	33	4	31	33	89	100	69	13.0	0.07	0.87	1.10	0.65	5	21	68
50	Distillers Grains with Solubles, sorgf	92	46	4	31	47	88	99	68	10.0	0.25	0.65	0.50	0.40			68
51	Grain Screenings	90			14	65	65	67	40	5.5	0.25	0.34					30
52	Rice Bran, full fat	91	23	0	14	70	72	77	49	19.0	0.66	1.70	1.80	0.19	12	396	40
53	Rice Mill Byproduct	91	60	0	7	60	42	43	0	5.7	0.40	0.31	2.20	0.30			31
54	Soybean Hulls	90	64	28	12	72	77	84	55	2.6	0.53	0.18	1.40	0.12	18	10	38
55	Wheat Bran	89	46	4	17	72	70	74	47	4.5	0.13	1.29	1.40	0.24	14		96
56	Wheat Middlings	89	36	2	19	78	79	87	58	4.6	0.15	1.00	1.40	0.24	11	128	96
57	Wheat Mill Run	90	37	0	17	72	75	81	53	4.4	0.12	1.00	1.20	0.22	21		90
58	Wheat Shorts	89	30	0	20	75	80	88	59	5.4	0.10	0.95	1.10	0.20	13		118
Feed Grains																	
64	Corn Grain, whole	88	9	60	10	42	88	99	68	4.3	0.02	0.30	0.40	0.12	3	8	18
65	Corn Grain, steam flaked	85	9	40	10	41	93	106	74	4.1	0.02	0.27	0.40	0.12	3	8	18
66	Wheat	89	12	0	14	77	89	100	69	2.3	0.05	0.44	0.40	0.14	6	37	40
67	Milo, ground	89	16	5	11	45	82	91	61	3.1	0.04	0.32	0.40	0.14	5	15	18
68	Milo, steam flaked	82	20	38	11	38	90	102	70	3.1	0.04	0.28	0.40	0.14	5	15	18
High Protein Meals and Seeds																	
69	Cottonseed, whole	91	47	100	23	62	95	108	76	17.8	0.16	0.62	1.22	0.26	8	12	38
70	Cottonseed meal, 41%	90	25	23	48	58	77	84	55	1.8	0.22	1.25	1.70	0.44	17	57	66
71	Peanut Meal, solvent	91	27	23	50	73	77	84	55	3.6	0.24	0.58	1.00	0.30	16	29	38
72	Soybean meal, 48%	91	9	23	54	64	87	98	67	1.2	0.28	0.71	2.20	0.47	23	41	61
73	Soybeans, whole	88	15	100	40	72	93	106	74	18.8	0.27	0.64	2.00	0.34	15	35	59
74	Sunflower Seed Meal, solvent	91	24	80	19	75	122	142	103	42.0	0.71	0.51	1.06	0.21	20	35	53
75	Sunflower Seed Meal with Hulls	91	40	23	26	80	60	68	42	2.9	0.45	1.02	1.27	0.33	4	20	105
76	Mung Beans	90			23	25	79	87	58		1.19	0.68	1.40	0.25			
77	Feather meal	92	44	23	86	27	69	73	45	6.5	0.60	0.62	0.20	1.85	14	12	95