

HAY QUALITY AND SUPPLEMENTATION

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The foundation of all flock nutrition programs should be quality forage. Under grazing conditions, forage can meet a ewe's energy and protein requirement except during lactation. However, the forage supplied to the flock during the winter is generally in the form of hay. There is a large variation in hay quality beyond forage variety and cutting. Fertilization and harvest conditions also have a significant impact on hay quality. Visual evaluation and comparison can detect gross differences between hays, but do little to estimate nutrient content. Only through forage testing can the nutrition content be estimated and a feeding program devised. Farmers can distinguish between their top and bottom hays when the hay is harvested. However, the question then becomes "How good is the better hay and how bad the poor hay is?" The only way to answer that question is to sample the hay and submit the samples to a testing laboratory. VCE Publication Number 404-300 "The Basics of Forage Testing" discusses in more detail sampling procedures and comparison of results.

As potential hays are evaluated, the following tables are helpful in comparing hay nutrient content to a stage of production for the ewe and potential feedstuffs that fulfill deficiencies.

Table 1 TDN and CP Requirements of 180 lb ewe

Stage of Production	TDN Lb/d	CP, Lb/d	Voluntary DM Intake Lb/d	Percent TDN*	Percent CP*
Maintenance	1.6	.27	2.9	55.0	9.3
Early Pregnancy	1.8	.31	3.3	55.0	9.4
Late Gestation	2.9	.49	4.4	65.5	11.1
Early Lactation	4.3	.96	6.6	65.5	14.5

* Percentage of the Dry Matter

Table 2 Forage Quality and Supplementation (176 lb ewe)¹

Forage Analysis		Early ² Gestation		Late ³ Gestation		Early ⁴ Lactation		Late ⁵ Lactation	
CP % of DM	TDN % of DM	Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn	Lbs SBM	Lbs Corn
11.2 & over	56 & over	-	-	-	.75	.5	2.5	.3	1.5
9.5 - 11.1	56 & over	-	-	.15	.75	.8	2.5	.45	1.5
	53 - 56	-	-	.15	.85	.8	2.7	.45	1.65
	50 - 53	-	-	.15	1.0	.8	2.9	.45	1.80
8.2 - 9.5	54 - 56	-	-	.25	.8	1.0	2.5	.55	1.5
	51 - 54	-	.2	.25	1.0	1.0	2.75	.55	1.75
	50 & under	-	.4	.25	1.2	1.0	3.0	.55	2.0
7.3 - 8.2	53 - 55	.1	-	.4	.8	1.1	2.5	.6	1.5
	51 - 53	.1	.2	.4	1.0	1.1	2.75	.6	1.75
	50 & under	.1	.4	.4	1.2	1.1	3.0	.6	2.0
Under 7.3	Under 48	.2 - .3	.5 - 1.0	.4 - .5	1 - 1.5	1.2 - 1.5	2.5 - 3.5	.7 - .8	2.0 - 3.0

¹ Recommendations are made on basis of 44 % soybean meal and ground shelled corn. Other supplements can be used to deliver the same amount of energy and protein.

² Dry ewes in the first 15 weeks

³ Last 4 weeks of pregnancy (200% lambing rate expected).

⁴ First 6-8 weeks of lactation suckling twins

⁵ Last 4- 6 weeks suckling twins.

** Note 1.5 lbs of corn gluten feed can replace 1.0 lb corn and .5 lb soybean meal.