

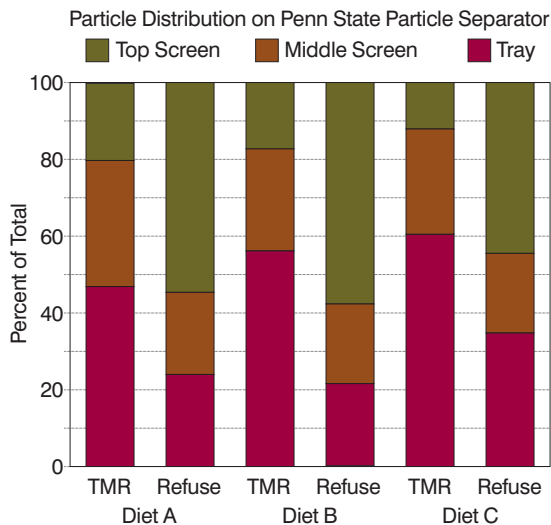
Feeding Alfalfa

Hay or haylage?

Feed advisors often suggest that adding hay to the TMR (total mixed ration) fed to lactating cows will reduce the risk of acidosis and improve production. However, replacing silage with hay results in a drier TMR which may negate the beneficial effects of adding hay by allowing increased sorting.

A recent trial at the University of Manitoba looked at the effects of alfalfa forage type (hay or haylage) in TMRs offered to 3 groups of 4 cows averaging 142 days in milk. Three different diets were fed to each group in turn. The 3 diets contained 13.7% alfalfa on a dry matter basis as either 100% hay (A), 100% haylage (B) or 50% hay:50% haylage (C). The balance of the forage in all diets was coarse-chopped barley silage.

Diet analyses and production data are summarized in the table below. The graph on the right shows par-



title size distributions for the diets offered and refusals from each. Results of the trial were summarized by the authors as follows:

- completely replacing alfalfa haylage with chopped hay increased dry matter intake by 11% and lowered milk protein test by 5%;
- replacement of half the alfalfa silage with hay produced the highest milk fat test among the 3 diets;
- differences in particle size distributions between diets offered and refusals were indicative of substantial sorting in the feedbunk;
- although differences were not statistically significant, refusals were greater when diets contained hay;
- changes in dietary proportions of haylage and hay had no statistically significant effects on rumen pH or milk yield.

source: M.S. Einarson & J.C. Plaizier, J Dairy Sci 85(supp 1):277 (2002)

	Diet		
	A	B	C
Diet Analyses:			
Dry Matter (DM), %	45.2	51.1	54.9
Crude Protein, %	13.9	16.3	16.9
Neutral Det Fibre, %	50.3	46.0	45.5
Production Variables:			
DM Intake, kg/day	19.1 ^b	20.4 ^{ab}	21.2 ^a
Refusals, % wet TMR	7.5	11.0	10.6
Rumen pH	6.52	6.53	6.60
Milk Yield, kg/day	33.3	32.1	32.3
Milk Fat, %	3.02 ^b	3.31 ^a	3.08 ^b
Milk Protein, %	3.04 ^a	2.91 ^{ab}	2.89 ^b

^{ab} within rows, values with different superscripts are significantly different from one another, based on a statistical test.