

Canola Meal.

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Effects of supplementing rumen-protected met and lys on diets containing soybean meal or canola meal in lactating dairy cows.

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Previously, replacing solvent soybean meal (SBM) with equal CP from canola meal (CM) was found to increase milk yield in lactating dairy cows by about 1 kg/d. We tested whether supplementing rumen-protected Met and Lys (RPML) would improve milk and protein yield in cows fed either CM or SBM. Sixteen lactating Holstein cows were blocked by DIM and parity into 4 squares of 4 cows each in a replicated 4 × 4 Latin square. There was a 2 × 2 arrangement of treatments: equal CP supplemented as either SBM or CM, with or without added RPML to provide 10 g absorbed Met/d (Mepron[®]) plus 22 g absorbed Lys/(AminoShureL[®]). Cows within squares were randomly assigned to treatment sequences and fed experimental diets for 3-wk periods before switching diets. All diets contained (DM basis) 41% alfalfa silage, 25% corn silage, 2.3% mineral-vitamin premix, 1.4% ground shelled corn and 17% CP. Soybean meal diets contained 22% high moisture corn, 8.7% SBM and 28% NDF; CM diets contained 19% high moisture corn, 11.7% CM and

30% NDF. Data from the last week of each period were analyzed using the PROC MIXEDs of SAS; LS-means are reported in the table. Replacing SBM with CM increased DMI (P = 0.04) and tended to increase yields of energy-corrected milk and fat (P ≤ 0.09), but there were no other effects on production (P ≥ 0.15). Supplementing with RPML did not influence intake or yield (P ≥ 0.15) and no significant of protein × RPML interactions were detected (P ≥ 0.15). These results tended to support previous findings of improved milk yield on CM versus SBM. However, under the conditions of this trial, there were no effects of supplementing with rumen-protected Met plus Lys on either protein source.

KEYWORDS

Soybean meal

Canola meal

Rumen-protected AA

TABLE 1530

Protein RPML	SSBM	SSBM	CM	CM	Contrasts		
	-	+	-	+	Protein	RPML	P × R
Trait							
DMI, kg/d	27.1	27.2	27.8	27.5	0.04	0.66	0.36
Milk, kg/d	38.4	38.1	39.1	38.5	0.18	0.27	0.71
Milk/DMI	1.42	1.40	1.41	1.40	0.79	0.38	0.81
ECM, kg/d	39.3	38.7	40.3	39.6	0.09	0.23	0.88
ECM/DMI	1.45	1.42	1.45	1.44	0.54	0.26	0.59
Fat, kg/d	1.62	1.57	1.67	1.63	0.06	0.14	0.90
Prot, kg/d	1.27	1.27	1.30	1.29	0.14	0.65	0.51
MUN, mg/dl	15.2	15.0	15.0	15.0	0.72	0.60	0.73

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Contact your feed supplier about complementing your herd's ration with a balanced, efficient source of protein: canola meal.

