

AN EVALUATION OF THE NUTRITIVE VALUE OF CANOLA MEAL FOR YOUNG PIGS

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In Europe rape with less than 35 μ mol/g of glucosinolate is called 'double-low' and in Canada cultivars of rape with less than 30 μ mol/g of glucosinolates are termed canola. Several experiments have demonstrated reduced feed intake and reduced performance of young pigs fed canola meal (CM) supplemented diets (Baidoo *et al.* 1987) possible that the reduced feed intake is due to a low palatability of CM. The objective of this experiment was to determine if prior exposure to CM-or the addition of a feed flavour to CM-supplemented diets would increase the feed intake of pigs fed CM-supplemented diets.

Seventy-two crossbred pigs with an initial weight of 8.0 \pm 0.4 kg were assigned (3 pigs/pen) on the basis of initial weight to diets supplemented with soya bean meal (SBM) (48 pigs) or 8.5% CM (24 pigs). After 14 days on test, half the pigs fed the SBM diet were switched to a diet containing 8.5% CM. The diets were fed *ad libitum* with and without the addition of a flavour additive (ultra sweet pignectar) from 12 to 20 kg live weight.

Prior exposure to CM did not significantly influence the feed intake of pigs fed CM-supplemented diets (Table 1). There was no significant difference in feed intake, growth rate or feed to gain ratio of pigs fed diets supplemented with SBM or 8.5% CM. The addition of a feed flavour to the SBM or CM-supplemented diet did not improve feed intake or pig performance (Table 2).

TABLE 1 The effects of prior exposure to canola meal on subsequent feed intake on canola meal-supplemented diets (12-20 kg)

Prior exposure* to 8.5% CM	no	no	yes	SE
CM in diet (%)	0	8.5	8.5	
Daily feed (g)	869	854	808	29.5
Daily gain (g)	555	499	510	17.1
Feed gain:	1.58	1.70	1.58	0.05

12 replications/treatment. 3 pigs/replication

* Prior exposure to CM from 8 to 12 kg live weight

TABLE 2 Effect of feed flavour (pignector) on feed intake of young pigs fed CM-supplemented diets (12 to 20 kg)

CM(%)	0	0	8.5	8.5	17.0	17.0	SE
Flavour	-	+	-	+	-	+	
Feed/d (g)	864a	873a	819ab	843ab	763b	782b	29.5
Growth/d (g)	550a	560a	503ab	507ab	475b	483b	17.2
Feed:gain	1.59	21.56	1.61	1.64	1.61	1.61	0.05

12 pigs/treatment. a,b means with the same superscript or no superscript are not significantly different ($P < 0.05$).

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