Canola meal is commonly used as a protein source in rations for dairy cows and beef cattle. However, the use of canola meal in rations for newborn calves is limited due to concerns of low palatability and low digestibility. Researchers conducted a study to determine the optimal inclusion rate of canola meal as a replacement for soybean meal crude protein in starter mixtures for Holstein calves. Overall, the study showed that replacing 45% of the crude protein from soybean meal with canola meal in starters for calves does not negatively affect starter intake, average daily gain, or post-weaning feed efficiency.

Researchers at the University of Saskatchewan initiated a study to determine the optimal inclusion rate of canola meal in starter mixtures for Holstein calves. The study included 50 newborn heifer calves assigned to one of five treatments. The treatments compared the inclusion rate of canola meal to substitute 0, 15, 30, 45, or 60 per cent dietary crude protein (CP) of the soybean meal in starter mixtures, or inclusion rates of 0, 5.2, 10.4, 15.7, and 20.7 per cent dry matter (DM). Crude protein and starch concentrations were balanced across treatments with corn, barley, corn gluten meal, and wheat bran.
During the feeding trial, free access to the starter mixtures was provided from day 8 until the end of the trial at day 71. Calves were also fed milk replacer at 15 per cent body weight until being exposed to a three-week step-down weaning protocol with weaning occurring on day 57. Feed and milk replacer intake were recorded daily, and body weight was measured weekly. At the end of the trial, ruminal fluid was collected and pH of the sample was measured. Researchers analyzed the data to determine whether increased inclusion of canola meal affected performance of the calves.

The study results showed that although starter intake tended to decrease linearly with increasing canola meal inclusion rates, there were no differences in average daily gain or cumulative growth across all five treatments at the end of the study. The milk replacer intake did not differ among the treatments. Across all treatments, the calves gained on average 0.88 kg/day and the cumulative growth averaged 61 kg. The study also showed no treatment effects post-weaning on feed efficiency or ruminal fluid pH. The study showed replacing soybean meal with canola meal has minor effects on ruminal fermentation, providing starter crude protein and starch concentrations were maintained.

Overall, the study showed that the use of canola meal in starters for calves by replacing 45 per cent of the crude protein from soybean meal does not negatively affect starter intake, average daily gain, or post-weaning feed efficiency. This study further supports the potential to utilize canola meal in diets for calves prior to and post-weaning.