Letter to the Editor: A Response to the Comments of Rastani and Kertz (2008)

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We appreciate the opportunity to respond to the Letter to the Editor by Rastani and Kertz (2008) in response to our paper published in the *Journal of Dairy Science* (Petit et al., 2007). We acknowledge the fact that dietary NDF concentrations ranged from 33.4 to 39.4% of the DM, which is a difference of 6 points. Moreover, greater forage to concentrate ratio and NDF concentration in the diet of cows fed saturated lipids led to lower postpartum DMI compared with cows fed whole flaxseed or a control diet. Therefore, the response to fat treatments was partly confounded by differences in the forage to concentrate ratios and dietary NDF concentrations of the 3 postpartum diets. Feed intake might have been at least partly limited by gut fill, especially for the 39.4% NDF diet that contained saturated lipids. Furthermore, much lower starch concentration in the diet containing saturated lipids very likely contributed to lower plasma glucose and greater NEFA concentrations for this diet. Comparisons of control (CO, no supplemental fat) and unsaturated lipids supplied as whole flaxseed (FL) to saturated lipids supplied as Energy Booster (EB; MSC, Dundee, IL) were confounded by different forage to concentrate ratios that likely affected response variables, although the comparison between CO and FL may still be valid. Indeed, cows fed the CO and FL diets had similar DMI after

calving ($P > 0.05$), and NDF concentrations in CO and FL diets were also similar but some blood parameters related to fatty liver syndrome differed between these diets. Multiparous cows fed FL had lower concentrations of triglycerides than those fed CO or EB in wk 4 after calving. Moreover, liver glycogen concentration after calving was significantly greater for multiparous cows fed FL compared with those fed CO. There was no confounding effect between diets CO and FL because similar DMI for both resulted in differences for some parameters related to fatty liver syndrome.

Finally, the objectives of the present experiment were to “determine the effects of feeding flaxseed, a rich source of n-3 FA, on liver concentrations of TG, glycogen, and total lipids, liver and blood profiles of FA, and plasma concentrations of NEFA, BHBA, FA, and glucose. Energy Booster, a source of saturated and rumen inert lipids, was compared with flaxseed to determine the effects of dietary lipids with different profiles of fatty acids.” Therefore, these objectives were met by the results reported by Petit et al. (2007) regarding the effects of flaxseed on blood and liver concentrations of different parameters and the conclusion goes along with the objectives.

REFERENCES

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