Effects of Dietary $\alpha$-Amylase on Metabolism and Performance of Transition Dairy Cows.

By DeFrain et al., page 4405. An $\alpha$-amylase preparation was fed to transition dairy cows to determine effects of altering ruminal fermentation on peripartum performance and metabolism. Feeding $\alpha$-amylase tended to increase ruminal butyrate and significantly increased plasma concentrations of $\beta$-hydroxybutyrate and nonesterified fatty acids prepartum but not postpartum. Concentrations of glucose in plasma tended to be increased postpartum. Cows fed diets supplemented with $\alpha$-amylase demonstrated improved energy balance postpartum consistent with goals for management of the transition dairy cows.