Effects of Feeding Frequency and Feeding Level on Nutrient Utilization in Heavy Preruminant Calves. By van den Borne et al., page 3578. Effects of feeding frequency on protein and energy utilization were studied in heavy milk-fed calves at high and low feeding levels. Whey protein was used as the only protein source in the diet. The efficiency of protein utilization increased with increasing feeding frequency, but was not affected by feeding level. An interaction between feeding frequency and feeding level was not observed. Increasing the feeding frequency or feeding level resulted in a higher fat deposition. Circadian patterns of heat production were strongly affected by feeding frequency and feeding level.