Concentrations of Progesterone and Insulin in Serum of Nonlactating Dairy Cows in Response to Carbohydrate Source and Processing. By Moriel et al., page 4616. Insulin and progesterone are important hormones for the reproduction of high-producing dairy cows. They affect oocyte and embryo quality and development. Concentrations of insulin and progesterone in blood were not affected by type of carbohydrate, whereas insulin was altered by increasing availability of starch in corn because of processing. Therefore, feeding a more rumen-degradable starch increased insulin concentrations in serum of dairy cows.