Nutrition, Metabolism, and Fertility in Dairy Cows: 1. Dietary Energy Source and Ovarian Function. By Garnsworthy et al., page 3814. Effects of varying proportions of dietary starch and fatty acids on metabolic hormones and ovarian function were assessed in lactating dairy cows. Plasma insulin to glucagon ratio increased with increasing dietary starch and decreasing dietary fatty acid concentrations. Other hormones, milk yield, and energy balance were not affected. The number of small ovarian follicles was positively related to starch intake and plasma insulin concentration. These observations suggest that maintaining adequate insulin to glucagon ratio in early lactation will have a positive impact on ovarian function in dairy cows.