Insulin resistance in divergent strains of Holstein-Friesian dairy cows offered fresh pasture and increasing amounts of concentrate in early lactation. By Chagas et al., page 216. Insulin resistance in early lactation facilitates the prioritization of nutrients for the mammary gland but there are few data on the effects of genetics or nutrition on this physiologically important trait in grazing dairy cows. An intravenous glucose challenge was administered to 60 Holstein-Friesian cows of either North American or New Zealand origin receiving 0, 3, or 6 kg of dry matter per day of concentrate and unrestricted access to fresh pasture. North American cows were more insulin resistant in early lactation than their New Zealand counterparts, and supplementing cows with 6 kg of concentrate reduced insulin resistance in early lactation. Results indicate that insulin resistance varies with cow genetics and in response to nutrition.