Leptin Genotype is Associated with Lactation Performance and Health of Holstein Cows. 
By Chebel et al., page 2893. Leptin is secreted by the adipose tissue and it influences satiety, feed intake, body weight, energy expenditure, reproduction, and immunity. Polymorphisms in the leptin gene are associated with leptin concentration and its activity. Cows homozygous for the C allele of the R4C locus of the exon-2 region of the leptin gene had reduced lactational performance compared with cows of CT and TT genotypes. Heterozygosity in the leptin gene was associated with reduced incidence of disease. Mating decisions to increase the frequency of cows heterozygous in the R4C locus may improve lactation performance and health of dairy cows.