Influence of Body Condition Score on Relationships Between Metabolic Status and Oxidative Stress in Periparturient Dairy Cows. By Bernabucci et al., page 2017. Little information is available on changes in oxidative status and relationship between oxidative and metabolic status in transition dairy cows. Peripartum period and BCS can affect oxidative status of dairy cows. Periparturient cows can experience oxidative stress, and cows with high BCS and large BCS losses are most sensitive to oxidative stress. Among markers of oxidative status, erythrocyte thiols concentration, plasma thiobarbituric acid-reactive substances concentration, and plasma glutathione peroxidase activity are the best measures of oxidative status in transition dairy cows.