Multiparous Cows Delivering a Male Calf Had Lower Dry Matter Intake During Transition Period

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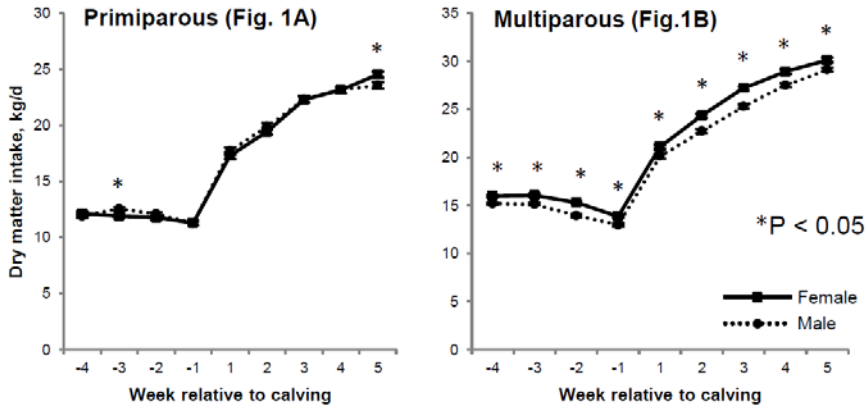
The increase in energy requirements for fetal growth and milk production is a major challenge for dairy cows during the transition period. During the last 35 d of gestation, dramatic increase of fetal growth reduces ruminal capacity and dry matter intake (DMI) which is a key determinant of energy status. It is not known whether fetal gender influences maternal DMI. Therefore, we investigated retrospectively if DMI during pre and postpartum periods differed between cows delivering male vs. female calves. DMI was monitored daily in 129 cows, (46 primi, 83 multiparous; 66 male, 63 female calves) from 35 d before until 35 d after calving. We found a significant parity by calf gender interaction for DMI. Calf gender did not affect DMI in primiparous cows (overall pre- and postpartum DMI were 11.9 and 21.3 kg/d; Fig.1A), but multiparous cows bearing a male calf had lower DMI than those that bore a female calf during both pre- (14.3 vs. 15.3 kg/d) and post-partum (24.9 vs. 26.3 kg/d) periods (Fig. 1B).



Take Home Message: Multiparous cows bearing a male calf had lower DMI from about 35 d before until 35 d after calving. The implications of this intriguing new finding are not known, but calls for further study.