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## DRY MATTER INTAKE OF NELLORE COWS IN FEEDLOT DURING THE PERIPARTUM

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### RESUMO

Understanding the dry matter intake (DMI) capacity of ruminants, and how the physiological state affects the magnitude of changes in this matter has great importance for the correct nutritional and reproductive management. Several studies have been carried out to assess intake and digestibility in grazing cows, however, measures of intake closer to calving date are not made, due to laborious and stressful conditions of handling procedures. The aiming of this study was to measure dry matter intake of Nelore cows in feedlot during the peripartum. The study was carried out at the Experimental Feedlot facilities of the Animal Science Department at the Federal University of Viçosa (UFV). Ten multiparous Nelore cows, with an average body weight (BW) of  $500 \pm 30$  and their calves, were used in this experiment. Cows were taken to feedlot at 8 months of gestation and placed in individual pens with concrete floor with a total area of 30 m<sup>2</sup>. Cows were randomly divided in two treatments, *ad libitum* supply of chopped sugar cane and *Urochloa decumbens* grass. The sugar cane protein was corrected with urea to reach the protein level of the *Urochloa decumbens*. Cows received a 35% CP supplement during the pre-partum phase in the amount of 1 kg/animal/d and mineral mixed (MM) *ad libitum*. After calving, cows remained in the same pens but received only MM *ad libitum* until 21 lactation days. Cows were fed twice a day (7:00h and 15:00h) and intake was adjusted to allow minimal orts without DMI restriction. The intake measurements started from 21 days before expected calving date until 21 days postpartum. All the statistical evaluations were performed considering 0.05 as the critical level of probability for the occurrence of the type I error. The statistical analyses were carried out using the PROC MIXED of SAS 9.4 (Inst. Inc., Cary, NC, USA). DMI was not different between treatments during pre-partum ( $P > 0.05$ ) but had effect of day ( $P < 0.05$ ). DMI was similar during pre-partum days except for the parturition that had a decrease of 30% of DMI ( $P < 0.05$ ). An interaction occurred between treatment and day for DMI, where Braquiaria cows had higher DMI than sugar cane cows after 17 days post-partum. Effect of day was also found, where Braquiaria cows had a linear increase in DMI after 17 days.

**PALAVRAS-CHAVE:** Nutrição e produção de ruminantes, gestação, transition period, Zebu

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