

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EFFECT OF PREBIOTIC AND FEED RESTRICTION ON CALVES PERFORMANCE

Natália Alves COSTA^{*1}, Reginaldo Nassar FERREIRA², Luis Fernando de Sousa CAIXETA², Rosiane Francisco BRITO², Gabriel Camargo da SILVA², Joice Simões SANTANA²

*corresponding author: nattyalvesrv@hotmail.com

¹Universidade Federal de Goiás, Goiânia, Goiás, Brasil

²Universidade Federal de Goiás, Goiânia, Goiás, Brasil

The development of calves is still a challenge in milk production. Some alternatives are used to improve growth characteristics. Restricted milk feeding can influence rumen development and prebiotic supplementation helps to maintain the intestinal health and increase feed efficiency. This study compared three milk feeding methods and calf performance effect. The experiment was divided in two periods with 27 days each, twenty crossed Holstein bull calves were selected and housed individually in a barn with concrete floors. Animals were blocked by body weight and randomly allocated to one of four experimental treatments: an unsupplemented and unrestricted group (Control), restricted milk feeding in the first period (T1), supplementation with 5 g of mannan-oligosaccharides by day (T2), supplementation with 5 g of fructo-oligosaccharides by day (T3). Calves were fed whole milk from plastic buckets twice daily at 0800 and 1500 h. Calves in the Control group ($n = 5$) received daily 6 L milk. Calves in the T1 group ($n = 5$) received daily 3 L milk from day 1 to 27, 6 L/d from day 28 to 54, and T2 and T3 ($n = 5$) received 6 L milk mixed with the supplement. The calves received starter ration, forage and water *ad libitum*. Unconsumed feed was removed from the feed buckets once a week and body weight was recorded every 15 days. Actual milk intake was calculated by subtracting the amount of milk refused from the total amount of milk offered to the calves. The daily gain of the animals of T1 in the first experimental period was about 200 g lower (0.431 ± 0.056) than the other groups and in the second experimental period the animals were able to reach the average weight gain of the others, which may be compensatory gain effect. Dry matter intake was significantly lower for T1 during the first period, since these animals were fed with 50% of the amount of milk supplied to the other groups. However, during the second period this same treatment had significantly higher consumption when compared with the other groups. No statistical difference was found for feed conversion in the two evaluated periods. Prebiotic supplementation has no effect on the calves performance throughout the experimental period. Milk restriction did not change final body weight but when this group was in the second experimental period they gained faster than the control.

Keywords: calf growth, compensatory gain, milk yield.

Promoção e Realização:



Apoio Institucional:



Organização:

