

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

FAILURE OF PASSIVE TRANSFER REDUCE WEIGHT GAIN IN HOLSTEIN DAIRY CALVES

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The incidence of Failure Passive Transfer (FPT) is an important predictor to disease development and are linked to high mortality in neonatal calves. The FPT may be consider the principal cause of an inefficient productive system, because it is linked to increase the incidence of diseases, and consequently reduces food consumption and weight gain. The purpose of this study was to estimate the FPT index in commercial dairy farms and demonstrate the influence of this on weight gain of preweaning calves. One hundred-fifty-three Holstein neonatal female calves with similar birth weight (mean \pm SEM: 40.04 Kg \pm 0.3 kg) were selected after birth from five commercial dairy farms (Rio Grande do Sul, Brazil) to evaluate immune passive transfer and his influence on weight gain and daily medium gain until 60 days of age. The study was conducted since March 2017 to January 2018. Blood samples were taken by jugular puncture into *Vacutainer* tubes with anticoagulant for the determination of total plasmatic protein (TPP) besides 24 and 48 h after the birth. After centrifugation, plasma was separated and evaluated with an optic refractometer. Calves with concentration \geq 5,5 g/dL were considered without FPT. Since birth until sixty days of age (birth, 7, 14, 21, 28 and 60 days of age), thoracic perimeter of the calves was measure and the weight were estimated by using a weighting tape. Statistical analysis was performed on NCSS software using qui square test to date linked to incidence of FPT and medium comparative test (t test) to compare weight gain. The FPT in this study was 37.7 % (n = 58). Linked to weight gain, calves with FPT had a tendency to decrease this parameter (37.19 \pm 0,81 Kg vs. 34.84 \pm 1,15 Kg, $P = 0.09$). So, as the same, the medium weight gain of calves with FPT tended to decrease ($P = 0.08$) when compared to those with good passive immune transfer (0.594 \pm 0.02 Kg vs. 0.636 \pm 0.01 Kg). We conclude that the FPT impact on weight gain of Holstein calves because animals with FPT had low kilograms at 60 days of age, and also that the incidence of calves without an adequate immune transfer is high. The results corroborate the importance of a good colostrum management. Also, serve as an alert to researches and technics to pay attention in how farms offer colostrum to this animal category.

Keywords: Calf, Colostrum, Neonate, Dairy.

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