MULTINUTRIENT BLOCKS AS HOW FEEDING STRATEGY TO OPTIMIZE THE USE OF CONCENTRATE FOR LACTATING GOATS

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Multinutrient blocks (MBs) have been indicated as feeding supplements in low forage availability situations. The search for feed alternatives which can reduce the proportion of concentrated ration in lactating goats’ diets is valid. The main objective of this study is to evaluate the use of MBs associated with concentrated ration amounts in the diet of lactating goats and their effects on the productive performance and economic viability. The experiment took place at the Pendencia Experimental Station of the State of Paraíba’s Agricultural Research Agency (Experimental Station Pending the State Agricultural Research Company of Paraíba). The experiment used eight Parda Alpina genotype multiparous goats, weighing approximately 43.13 ± 2.03 kg of live weight, distributed in two Latin squares (4 x 4), according to milk production. The experiment had four treatments (0.971; 0.746; 0.521 and 0.296 kg/concentrated ration/goat/day), being the control diet (0.971 kg/day) and MBs ad libitum for all treatments. The DM (Dry Matter), MBs and nutrients consumed were affected by the contents of concentrated ration in the diets. When the contents of concentrated ration in the diets were elevated, the total consumption of DM reduced linearly (Ŷ = 1.8718 + 0.0004x) for the lowest content in relation to the control diet. However, happened inverse behavior for the consumption of MBs (Ŷ = 0.2692 - 0.0002x). The milk production (MP/kg/day), had a linearly and positive relation (P<0.05) with the increase content of concentrated ration in the diets (Ŷ = 2.5013 + 0.0005x R² = 0.90). The MP, was lower (6.66%; 6.96% and 12.40%) for the decreasing contents of concentrated ration, when compared to the control diet. All the treatments allowed profit, at least, in a short period of time, but analyzing the financial indicators using MBs associated with a content of 521 g/day of concentrated ration was the most viable alternative. Being so, the supplementation of milk goats can be substituted (53.65%) by MBs, because between the contents of concentrated ration in the diets, this was the most interesting by its economic and production indicators point of view. Multinutrient blocks can be used in the feeding of lactate goats to partially substitute the concentrated ration with no harmful effects on the nutrient consumption, production and quality of the goat’s milk.

Keywords: Feeding plans, goat milk production and composition, profitability.