

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

WEIGHT GAIN AND BODY DEVELOPMENT OF MALE GOAT FEED WITH UREA: PRELIMINARY RESULTS

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In Brazil, there is a rising demand from goat milk and meat. Nevertheless, to increase the goat production viability is necessary to use low-cost nutrition strategies. Non-protein nitrogen, like urea, can be a viable option to compose diets. Although urea has been used in ruminant livestock, there are still few studies evaluating urea impacts on development of male goats. The objective of the present study was compare the effect of diets containing 2% or 0% of urea on weight gain, body length growth and thoracic circumference growth from male goats. It was used eighteen intact Saanen male goats with five months of age and initial average weight of $21,3 \pm 0,5$ kg. The experiment was conducted in Seropedica-RJ from 17/01/2018 until 04/04/2018 (77 days). The animals were divided in two groups: urea group that received 2% of urea in dry matter and control group that received soybean meal instead of urea. The two diets had 12% crude protein and 66% total digestible nutrients and were composed by 50% of Tifton 85 hay and 50% concentrated (corn meal and minerals plus urea or soybean meal, respectively). The animals were weighed and measured for body length and thoracic circumference weekly. The body weight was obtained in kilograms using a mechanic platform scale. The body length and thoracic circumference were measured in centimeters using a tape measure. Considering the initial and final data for the each of the threes variables and the length in days of the experiment, it were calculated the average weight gain ($\text{g}\cdot\text{day}^{-1}$), body length growth and ($\text{mm}\cdot\text{day}^{-1}$) and thoracic circumference growth ($\text{mm}\cdot\text{day}^{-1}$). Data were expressed as mean \pm standard error and the data normality was evaluated by D'Agostino-Pearson test. Means were compared between groups by Student t test, at 5% probability. It was not observed differences of weight daily gain between urea ($103,10 \pm 10,29$ g/day) and control ($110,00 \pm 9,88$ $\text{g}\cdot\text{day}^{-1}$) ($p=0.59$). Besides, in regards to body length growth, it was also not detected significant differences between urea ($0,84 \pm 0,11$ mm/day) and control ($0,79 \pm 0,010$ $\text{mm}\cdot\text{day}^{-1}$) groups ($p=0.78$). However, it was verified that urea group showed a lower thoracic circumference growth than the control group ($0,78 \pm 0,09$ $\text{mm}\cdot\text{day}^{-1}$ vs $1,04 \pm 0,05$ $\text{mm}\cdot\text{day}^{-1}$; $p=0.02$). In conclusion, the addition of 2% of urea in the diet of young male goats affects particularly the body growth without influence the weight gain.

Keywords: animal husbandry, goat breeding, ruminant nutrition, Saanen breed

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