

THEME 9 | RUMINANT NUTRITION AND PRODUCTION

Effect of feed levels over empty body weight and their components of lambs from seven genetic groups

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The objective was to evaluate the effect of feeding level over empty body weight (EBW) and their components of lambs from seven genetic groups: 32 White Dorper, 32 Ile-de-France, 26 Texel, 32 Santa Ines, 32 ½ White Dorper + ½ Santa Ines, 32 ½ Ile-de-France + ½ Santa Ines and 32 ½ Texel + ½ Santa Ines. The animals were weaned with 90 days of age and confined in individual pens with slatted floors during 42 days, after 15 days of adaptation. They received a pelleted diet with 90% concentrate and 10% alfalfa hay at the following levels: *ad libitum* (AL) (leftovers around 10%, adjusted daily), 0.75 and 0.63 g dry matter kg⁻¹ of metabolic weight (MW). Diets offered in the restricted treatments were readjusted weekly after weighing of animals without fasting. At the beginning and at the end of the experimental period, animals were weighed after solid fasting for 14 hours. At the end of the experimental period, lambs were slaughtered and body components were separated and weighed: blood, head+hooves+pelt, empty viscera and hot carcass (HCW kg). For the statistical analysis, the mixed model included the fixed effects of lamb's genetic group, intake level (AL, 75 and 63 g kg⁻¹) and the interaction between them, besides the random effect (weaning group, three in 2015 and two in 2016). There was no interaction ($P>0.05$) between genetic group and feeding level for body fractions weights. Besides, the higher the feed level offered to the animals, the higher body components weights ($P<0.05$), except for blood, when treatments AL and 0.75 g kg⁻¹ were similar ($P>0.05$). There was no difference ($P>0.05$) between genetic groups for blood and viscera weights. The highest weight of head+hooves+pelt fraction ($P<0.05$) was for Ile-de-France and Texel lambs, 6.98 and 6.80 kg, respectively. For HCW, Texel and ½ Texel + ½ Santa Ines lambs showed higher weights (19.00 and 17.36 kg, respectively). There was no interaction ($P>0.05$) between genetic group and feeding level for empty body weight. The AL feed level provided greater ($P<0.05$) empty body weight (32.21 kg) and the genetic group also influenced ($P<0.05$) the highest body weight was observed for Texel lambs (32.46 kg), followed by ½ Texel + ½ Santa Ines (30.39 kg) and Ile-de-France (30.34 kg). The feed level changes the weight of empty body and their components, but this effect is independent of genetic group.

Keywords: blood, carcass, head+hooves+pelt, nutrients requirements, viscera

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