Influence of breed, slaughter weight and feeding on sensory meat quality of suckling kids

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Goat production in Europe is mainly based in milk with high specialized breeds. Also, many local populations, with low dairy performances, are been considered as meat breeds and the kids as a delicatessen by South European consumers. In this scenario, the study of kid’s meat quality and how it is affected by weight or rearing system is a relevant issue for the Goat Sector. We have studied the effect of breed (B) on kid’s meat organoleptic characteristics using 201 animals from 7 Spanish goat breeds. The effect of slaughter weight (SW) was assessed in 5 meat purpose breeds slaughtered with 4 or 7 kg of carcass weight, and the effect of feeding (F) was assessed in 2 dairy purpose breeds reared under natural or artificial milk conditions. Eight trained panellist evaluated 11 attributes on Longissimus dorsi muscle grilled until 70 °C of internal temperature. A GLM procedure was used to evaluate (B) in light and natural feeding animals, (SW) and (B) effects in meat purpose animals, and (B) and (F) in milk purpose animals, considering interactions between effects. No significant effect was found in goat and milk odour intensities, juiciness or fat, milk and sour flavour intensities. Tenderness, fibrousness, goat flavor, metallic flavour, acid flavor and overall acceptability were significantly affected by (B) independently of their aptitude. Tenderness was higher and fibrousness lower in light and in natural-milk fed animals. Goat flavour was higher in natural-milk fed animals, but not a clear effect of (SW) was observed. Metallic or acid flavours and acceptability were not clearly affected by (SW) or (F), but many significant interactions between effects were observed. In conclusion, kid sensory quality is significantly affected by breed and, inside breed, the increase of weight and the rearing status affects differently depending upon the considered breed.

Growth rate, carcass and meat quality of ewes finished with different linseed levels

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Lamb is a highly appreciated product by consumers. However, ewe’s meat is hardly consumed in Europe due to its strong odour and flavour and because their productive indexes make no rentable to fatten them. Diet supplementation would enhance carcass and meat quality, giving an added value to this product and a profit for the breeder, especially when it would be done with low cost sources, such as linseed supplementation. The aim of this study was to assess the effect of 3 linseed supplementation levels -LS- (5, 10, or 15%) during two periods -P- (30 or 51 d) on 8 animals for each LS and P, and 8 animals as control batch. With this purpose, we measured weight and body condition score at the beginning and the end of each P, estimating average daily consumption (ADC) and gain (ADG), to calculate the conversion index (CI). Hot carcass weight (HCW) and condition and fatness scores were assessed, carcass yield was calculated, and tissue composition was performed on the left shoulder. Fat thickness, loin area (13th thoracic vertebrae) and pH and meat colour (5th thoracic vertebrae) were measured. Treatment effect [(3LS x 2P)+control] was assessed using the GLM procedure of the SPSS statistical package. Production indexes, carcass and meat quality were significantly affected by the studied treatments. ADG, CI and growth costs were lower at 30 than at 51 d. Final live and carcass weights, carcass yield, fat percentage and loin thickness, were higher on supplemented animals, although only 15LS/51P was significantly different from the control batch. Lightness, yellowness, and hue were higher on the control batch. In conclusion, P has a higher influence than SL on the studied variables. With these preliminary results, it could be recommended a 10LS/30d due to its lowest costs, although more studies are required.