Effect of season on muscle characteristics of camel calves

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Thirty 2-3 year-old camel calves fattened by local farmers in Sudan were used for this study. Ten calves were slaughtered according to different seasons (winter, summer and autumn) to examine the muscle characteristics according to season. Muscle samples were taken from Longissimus thoracis (LT) at the 5th thoracic vertebra. The overall chemical composition of LT showed mean values of 3.1, 17.2, 2.7 and 1.6% for DM, crude proteins, total lipids and fatty acids and ash, respectively. Unlike for CP and ash (P<0.001), no significant differences were found between seasons in DM and total lipids. Unlike in cattle, the results obtained from electrophoresis test indicated the presence of two muscle fibers only. The mean percentages were: type I 66.6% and type IIa 33.4%. Higher proportions (P<0.001) were observed in winter for type I (85.2%) and in autumn for type IIa (47.1%). Positive correlation coefficient was observed (0.80) between the proportion of fibers type IIa and isocitrate dehydrogenase (ICDH) enzyme activity. Enzymes mitochondrial (ICDH and COX) activities as well as phosphofructokinase activity were higher (P<0.001) during autumn season compared to summer and winter. In conclusion, muscle fiber characteristics in camel (except intramuscular fat content) are highly regulated by seasonal factors.

Carcass traits and carcass composition of roe deer (*Capreolus capreolus* L. 1758)

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Roe deer (*Capreolus capreolus* L. 1758) is one of the most important species of wild ruminants in Europe. Primarily, the value of roe deer is represented by value of animal trophy. On the other hand, venison of this species becomes more and more interested for additional income. However, research on carcass characteristics of roe deer are seldom carried out since the farming of roe deer is not so common. In order to determine carcass traits and carcass composition data of 36 roe deer (25 male and 11 female) shot in one open hunting ground in central Serbia were used. Analysed traits were body weight after shooting, hot carcass weight, hot dressing percentage, leg weight, back weight, shoulder weight, neck weight and thorax weight. Average body weight after shooting was 26.4 kg and 26.12 for male and female, while hot carcass weight was 15.95 kg and 15.20 kg for male and female, respectively. Hot dressing percentage was 60.44% and 58.14% for male and female, respectively. The weights of the most important part of carcass were: 5.22 kg and 5.18 kg for male leg weight and female leg weight, respectively; 1.86 kg and 1.64 kg for male back weight and back leg weight, respectively; 2.43 kg and 2.29 kg for male shoulder weight and female shoulder weight, respectively; 1.19 kg and 0.94 kg for male neck weight and female neck weight, respectively; and 1.77 kg and 1.62 kg for male thorax weight and female thorax weight, respectively. Sex had significant effect on hot dressing percentage (P<0.01), back weight (P<0.01) and neck weight (P<0.005), while for other analysed traits sex of animals had no effect.