

Effect of breed on the quality attributes of camel meat

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Abstract

This study was carried out to differentiate between camel breeds with respect to their chemical composition and meat quality characteristics. Four breeds were selected: Magahem, Wodoh, Shoal, and Sofor. The animals' ages and final weight were approximately 12 months and 281.3±9.32 kg, respectively. To identify the differences between these breeds, we collected 6 *longissimus dorsi* (LD) and 6 *Biceps femoris* (BF) muscles from the animals. Meat samples were taken from the LD for chemical composition analysis, and meat quality parameters were characterized for both types of muscles. Assessments were made of the following parameters: myofibril fragmentation index (MFI) score, sarcomere length (SL), fiber area (FA), slice shear force (SSF), pH, loss of volume through cooking, cooking time, and color. The breed groups exhibited significant differences in their fat content as well as differences in SSF values for the LD: Shoa>Wodoh>Sofor>Magahem. The 4 breeds also showed significant differences in LD MFI values. The results indicate that there are significant differences between the breed groups and their muscles with respect to the composition and quality of their meat.

Key words: Breed, Camel, Meat quality