

# Session (9) : Meat Production

# Physicochemical and Sensory Characteristics of Burger Manufactured from Camel Meat with Different Levels of Cowpea

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## ABSTRACT

The study was conducted to evaluate the effect of adding different level of cow pea on the physical, chemical and sensory characteristics of camel meat burgers. Mature camel meat (4kg camel meat and 1kg kidney fat) and three level of cow pea (10%, 20% and 30%) were also used. Physical characteristics, chemical composition and sensory panel scores were determined. The data were analyzed as a complete randomized design using statistical software program version 17 (SPSS). The results revealed that the chemical composition (moisture, protein and fat) and flavour were significantly ( $P < 0.05$ ) affected by the added level of cowpea. Increasing the added level of cow pea resulted in a highly significant ( $P < 0.01$ ) increase of the burgers protein contents and the value of colour co-ordinates  $L^*$  (lightness) and  $b^*$  (Yellowness), but the moisture, fat and cooking loss percentages and  $a^*$  (redness) value decreased significantly ( $P < 0.01$ ). There were no significant differences among the added levels of cowpea on ash and ultimate pH. Panel scores for color, juiciness, tenderness and overall acceptability were not significantly different between the control and the 10% and 20% added levels of cow pea although the values of the 20% level were lower than the 10% treatment. Increasing the added level of the cow pea to 30% resulted in a significant ( $P < 0.05$ ) decrease in the flavour and overall acceptability of camel meat burgers. The study concluded that addition of 10% and 20% of the cow pea can be acceptable in camel meat burgers but the 10% level is the best.

**Keywords:** camel burger, chemical analysis, cowpea