Effect of orifice size on quality characteristics of burger made from spent laying duck meat

ABSTRACT

An experiment was carried out to investigate the influence of orifice size (4.5, 6, 8 and 10 mm) on the quality characteristics and acceptability of duck burger made from spent laying Khaki Campbell duck meat. Large orifice size resulted in lower fat and protein content compared to small orifice size. Hardness value also decreased significantly (p < 0.05). However, there was no significant difference (p > 0.05) in the diameter of shrinkage, cooking loss and colour of the burger. However, the hardness value decreased significantly with an increase in orifice size. The sensory evaluation showed no significant difference (p > 0.05) within the samples, but the overall acceptability score for burger prepared using 10 mm grind size was higher compared to those prepared at 4.5, 6- and 8-mm orifice sizes. Hence the 10 mm grind size was adopted as the optimum orifice size for spent laying Khaki Campbell duck burger