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Colorimeter and total volatile nitrogen base assessments of *Kebabs* produced from meat of broiler fed cloves and garlic as additives in diet

Olayemi Rashidat Awodoyin,* Blessing Ololade Adekunle and Peter Kehinde Ojolo

University of Ibadan, Faculty of Agriculture, Department of Animal Science, PMB 200284, Ibadan, Nigeria

Abstract

The poultry industry has recently geared towards the incorporation of natural additives into diets in order to improve the quality of meat products. One-day-old 308 Ross broiler chicks (n= 200; r = 5, 10 birds/r) were randomly allotted to four diets: T1 (Basal Diet (BD), T2 (BD + 0.25 % garlic), T3 (BD + 0.15 % cloves) and T4 (BD + 0.25 % garlic+ 0.15 % cloves (GC). On 42 day, 3birds/replicate were randomly selected, euthanized, defeathered and meat excised from primal cuts and ground. Minced meat (each treatment) was used to produced chicken kebabs. Colorometric assessment (L* a* b*) and Total Volatile Basic Nitrogen (TVBN (mg/100g)) on days 0 and 7 were assessed following standard procedure. No significant differences (P>0.05) in colour parameters, L*(1.13-1.85), a* (1.04-1.32) and b* (1.50-1.71). On day 7, TVBN (7.48) in kebabs from cloves fed broiler was lower (P>0.05) than 7.94 (garlic), 7.65 (GC) and 8.15 (BD). Garlic and cloves inclusion in broiler diet improved the quality of the meat which is reflected in the shelf stability of chicken kebabs.

Keywords: *Antioxidants, natural additives, kebabs, protein oxidation, shelf stability*