

## Effect of Provitamin a Biofortified Maize Inclusion Diet on Consumers' Acceptability of Ovambo Chicken Meat

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**Abstract :** Consumers' surveys have indicated low acceptability of provitamin A biofortified maize (PABM), a high vitamin A (HVA) maize in Southern Africa to curb vitamin A deficiency (VAD). Indigenous chickens are reared and consumed by almost all rural households which are the major VAD prone areas in southern Africa. The objective of this study was to determine if HVA diet fed to the Ovambo indigenous chicken breed will influence consumers' acceptability of the meat. The leg (thigh and drumstick) of the male birds (21 weeks old) were used for the sensory characteristics. 52 consumer panellists evaluated the sensory characteristics on based on a 5-point hedonic scale and preference test. There was no significant difference ( $P < 0.05$ ) in the preference test between the two diets. There were no significant differences ( $P < 0.05$ ) between the diets based on all sensory characteristics. Age and gender of the consumers and their interactions had no effect ( $P < 0.05$ ) on the acceptability and sensory characteristic ratings. It was concluded that indigenous chickens fed provitamin A biofortified maize can be a possible tool for curbing VAD in southern Africa regions where there is low acceptability of the human consumption of provitamin A biofortified maize. It was concluded that PABM diet fed to indigenous chickens will not influence the acceptability of the chicken meat by VAD vulnerable consumers.

**Keywords :** biofortified pro-vitamin a maize, ovambo, chicken meat, sensory characteristics, gender, age

**Conference Title :** ICGFS 2016 : International Conference on Global Food Security

**Conference Location :** Miami, United States

**Conference Dates :** March 24-25, 2016