

QUALITY CHARACTERISTICS OF CHEVON OBTAINED FROM GOAT FED MELON (*Colocynthis citrillus*) HUSK AND PALM (*Elaeis guineensis*) OIL SLURRY

Abstract

A study was undertaken to determine effect of nutritional value of melon (*Colocynthis citrillus*) husk (MH) and palm (*Elaeis guineensis*) oil slurry (POS) on quality of chevon obtained from West African Dwarf (WAD) goats finished on four diets *viz.* diet 1 (0% MH, 0% POS); diet 2 (50% MH, 0% POS); diet 3 (0% MH, 50% POS) and diet 4 (50% MH, 50% POS). All animals were fed a basal diet of *Panicum maximum ad libitum*. After sixty days, eight goats (two goats per treatment) were slaughtered and muscles obtained from their forelegs. A sample of the raw meats was taken for pH measurement and Fatty acid analyses while the remaining was cooked by boiling and used for proximate analysis, cooking and refrigerated losses, and sensory evaluation. Data were subjected to one – way analysis of variance in a completely randomized design. Percent dry matter of the experimental diets ranged from 89.53% to 89.81%. The cooking weight loss for chevon showed no significant ($P>0.05$) difference but refrigerated weight loss (drip loss) showed significant ($P<0.05$) difference due to diets; lowest values were recorded on diets 2 (0.96g) and 4 (0.91g), respectively. Chevon obtained from animals fed diet 3 had the lowest percent crude protein content (21.51%) and highest cooking and refrigeration losses of 4.44% and 23.51%, respectively. Chevon obtained from all the diets fed gave significant ($P<0.05$) lower percentage values for linolenic acid compare with the control, while chevon from goats fed diet 3 gave a reduced percentage value of saturated fatty acids. In all the parameters considered for sensory evaluation, only flavour and saltiness showed significant ($P<0.05$) difference. It was concluded that Melon husk and palm oil slurry can be added at the various inclusion rates in this study depending on consumer preferences for either nutrient qualities or sensory properties of meat.