

## THE EFFECT OF BREED AND FEEDING REGIMEN ON THE CHEMICAL COMPOSITION , COLOR AND LIPID STABILITY AND CHOLESTEROL CONTENT IN MEAT AND KIDNEY FAT OF LOCAL GOATS .

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### ABSTRACT

Twelve weaned (3 months old) male kids from each of Meriz and native goat were weighed and randomly assigned equally into three groups according to different feeding regimen. Kids of 1<sup>st</sup> group had *ad libitum* access to concentrate (Intensive) , whereas kids in the 2<sup>nd</sup> group were left at pasture for 45 days and then moved to the farm to be fed *ad libitum* concentrate (semi-intensive). The 3<sup>rd</sup> group of kids was freely grazed at pasture (Extensive system). At the end of the trail (90 days), all kids were slaughtered and dressed. After chilling the carcasses at 4°C for 24 hours, Slices from meat was obtained from the leg and samples from kidney fat was minced separately and packed in polythene bags and stored at -18°C for analysis.

Results revealed that breeds feeding regime and their interaction affected significantly ( $p < 0.01$ ) moisture. Chemical composition of meat, yet the highest 69.70, 72.29% protein (7.22, 16.01%) decrease fat (9.51, 6.58%) content was recorded for Meriz raised intensively and on pasture, respectively.

Also , it appear from the values of Meta-myoglobin , TBA and P.V. that meat of Meriz has more desirable color and less fat oxidation , whereas meat from goat had higher values of TBA and P.V.

It appears that kidney fats are more resistant to oxidation compared to fat in meat. . Also, Cholesterol concentration in meat of both Meriz and goat was lower than its concentration in kidney fat.