

# Effect of Testosterone Enanthate Injection on Some Carcass Traits and Chemical Characteristics of Castrated Karadi Lambs Meat

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**Abstract:** This study was conducted to investigate the effect of testosterone enanthate injection on some carcass traits and chemical characteristics of Karadi castrated lambs meat. Twenty seven male Karadi lambs (3-4 months of age) with an average live weight of (28.7±3.8 kg) were reared in sheep farm, research station, Faculty of Agriculture Sciences, University of Sulaimania and allocated randomly by weight to three groups (treatments) by the dosage of testosterone enanthate (6 lambs for each treatment): G1 were not injected (control), G2 were injected by 200 mg and G3 were injected by 400 mg (IM weekly). All groups animals were fed with the same concentrate diet (3% of body weight), barley straw provided *ad libitum* and water was free, all group lambs were castrated by rubber band two weeks before experiment begins. There were three periods of slaughter : 60 days from the beginning of the experiment, 90 days and 120 days, at the end of each period three lambs from each treatment were randomly chosen and weighted, then humanly slaughtered. Many measurements were taken such as hot and cold carcass weight, carcass length, carcass thorax circumference, rib eye area and fat thickness, carcass cuts weight, non-carcass adipose tissue weight, edible organs and offal weight, also the chemical composition of Longissimus Dorsi muscle meat. From the results, it could be concluded that there were positive effects of testosterone enanthate injection, which was increasing of living body weight reflecting on hot and cold carcass weight increase with increasing age and period of treating with enanthate, that increase in carcass weight was related with increasing in weight of whole carcass cuts which was clearly noticed on second and third slaughtering period, and also that increase can be correlated with rib eye area which increase during the same periods, that means the gain in weight is a result of body lean gain due to testosterone enanthate injection. In addition, fat tail weight decrease may be explain as body energy turned to producing or synthesis lean instead of fat.