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لا توجد فروق معنوية في مستوى الجلوكوز.

et al, (2009). Mach

(Koyuncu et al,

2007)

Werdi Pratiwi, et al, (2006)

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(Hoelscher et al., 1988; Alasnier et al,1996; Madruga et al., 2001)

Johann F. Coetzee

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characteristics of Awassi lambs fed high concentrate diet  
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**ABSTRACT****The Effect of Castration on Body Weight and Serum biochemical Composition of Libyan Barbary Breed**

Mohamed A. Younes, Soliman A. Hamadi

The experiment has been carried out in El-Ariyal Agricultural project, Wadi Al- Shati (in the south of Libya), the experiment was done in four months period starting from January to April, 2010. The samples were twenty male lambs of Barbary sheep were randomly selected from the same flock at weaning age (3-4 months age and  $7.5 \pm 10.5$  kg live weight). Lambs were weaned at the same time and randomly divided into two groups (10 lambs each group). The groups were housed in two separate shelteres and numbered by plastic and metal numbers. Animals were given an adaptation period for 15 days before starting the experiment.

Lambs were fed dry Alfalfa and Oat hay (as roughage feeds) in addition to that they were fed 500 g of concentrated mixture twice a day. the amount of concentrated mixture was divided into two portions (250 g in the morning - 250 g in the evening). The water was given twice a day before the sample was fed

the concentrated mixture. Each lamb was weighed before and after the process of feeding started. The process of weighing was done every fifteen days systematically until the end of the experiment. Results of the experiment are illustrated as follows: the results showed significant decrease of weight in the castrated lambs compared to control lambs. Moreover, there was no significant difference showed in blood concentration of glucose. The total lipids did not show any significant change between the two groups. However the cholesterol concentration was significantly higher in serum of the castrated lambs compared with intact lambs, starting from day 105 until the end of the trial. The results of this experiment showed the castrated Barbary lambs performance were lower compared to international sheep breeds.

key words: Lambs, Barbary, Lipids, Proteins, Glucose, Cholesterol, Castraion