

Effects of Conjugated Linoleic Acid on the Reproductive Axis of Ram

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Abstract : Conjugated Linoleic Acid is a group of long-chain unsaturated fatty acids with more than one double bond and a mixture of 28 isomers of Linoleic acid (C 18:2) and it is counted as one of the essential acids. The main purpose of this study was to investigate the effect of CLA on some reproductive hormones in rams. In this study, six rams 3 to 4 years old with an average weight of 90 kg were selected. Rams were randomly divided into 3 groups and were treated by CLA treatment for 30 days. The first group (as a control group) did not receive CLA, The second group received 0.5 gr and the third group received 1 gram of CLA. The blood testing was done on rams every 15 days using a 20 ml syringe. Data analysis was performed by SAS software. Also mean comparison was done using Duncan's test method ($p < 0.05$). Obtained results showed that the serum concentration of testosterone hormone was decreased numerically as well as the concentration of FSH hormone however the concentration of LH was increased. Also, the CLA had a significant effect on Leptin concentration. CLA in oral form can reduce the concentration of testosterone in rams.

Keywords : CLA, ram, testosterone, conjugated linoleic acid

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