Performance of cortisol and hematic biometrics in ovine animal supplemented with selenium enriched yeast into finishing diet on physiological stress “in vivo”

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The current research was evaluated the response as result of addition of organic selenium in finishing diet of ovine animals on the physiological stress “in vivo”. 30 female ovine animals were used with 25±3.5 kg of live weight that was confined as follow: 0 ppm (T1), 0.35 ppm (T2) and 0.60 ppm (T3). The blood samples were gotten by venopuncion technique in the jugular vein at 0, 7, 14, 21, 27 and 60 days before slaughtering. The analysis of cortisol was done by competitive binding technique in order to quantify without previous purification. Previously it was obtained the strong serum in transcortin of cattle animals with estrogen to quantify corticosterone. A comparison of average realized with a Tukey test with α=0.05 showed the following: An average value of 4.46 nmol/L for cortisol, 9.56±1.24×10⁶/ul erythrocytes, 135.60±14.7 (g/cc) hemoglobin, 40.77±4.4 (%) hematocrit, 42.79±6.47 (%) of VGM, 9.62±4.5 (%) protein into the plasma, 332.08±0.7 (%) of cmHg, 10.00±7.3 (mil/mm³) leukocytes, 41.93±11.3 (mil/mm³) neutrocytes and 52.27±10.8 (mil/mm³) in lymphocytes. As for hematocrit, hemoglobin, leukocyte, VGM and CHGM, higher values were obtained for treatment 2 at a ratio of 0.3 ppm of Se. While for segmented neutrophils were higher values for the concentration of 0.6 ppm of selenium. It can be concluded that the addition of selenium could benefit the preservation of homeostasis of the animal in order to reduce physiological stress.

Biography

Araceli Gonzalez Nicanor is an Engineer Agronomist by profession, a Doctoral student in Agricultural Sciences and Natural Resources, and Professor at the Autonomous University of the State of Mexico (UAEM) and is currently interested in the issues of animal welfare and meat quality.

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