Mineral profile of sheep hairs as influenced by supplementation of vitamin A

Sushil Kumar Sharma and Babita Agarwal

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ABSTRACT : To find out the influence of administration of vitamin A on mineral profile of sheep hairs, six sheep of Marwari breed, selected randomly from the herd on the basis of various phenotypic traits (age 218.2 \pm 13.2 d; live weight 22.2 \pm 1.1 kg; body height 69.7 \pm 0.7 cm and body length 66.8 \pm 0.6 cm) and were offered identical feed to meet out their daily nutritional requirements. The animals were given oral administration of vitamin A at the rate of 5000 IU per Kg live weight. Samples of hairs were collected from various portions of the body on the day 00, 30, 60 and 90 of the experimental trial. The collected samples were subjected to estimation of major (Calcium, phosphorus and magnesium) and trace (Sodium, Cobalt, Copper, Iron and Nickel) elements using standard techniques. Collected data were analyzed statistically using standard techniques to draw valid conclusion. SPSS software was implemented for various statistical calculations for the purpose. It can be concluded on the basis of present study that content of calcium, sodium, cobalt, copper and nickel remained unchanged but phosphorus and magnesium were increased in sheep hairs due to supplementation of vitamin A, however enhancement in iron in this regard was outstanding.

Key Words : Hairs, iron, minerals, sheep, vitamin A.