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## Ambient temperature associated variations in serum ornithine carbamoyl transferase and gamma-glutamyl transferase in Marwari goats

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The research was conducted to study the ambient temperature associated variation in serum enzymes viz. Gamma-Glutamyl Transferase (GGT) and Ornithine Carbamoyl Transferase (OCT) of hepatic function in 540 apparently healthy Marwari goats. Each ambient temperature was divided in moderate, hot and cold period. 180 blood samples in each ambient temperature period were collected. Animals were grouped according to sex (90 male and 90 female) in each ambient temperature period. Animals were further divided into age groups (5-10 months, 1-2 years and 2.5-4 years) in each ambient temperature period. 60 blood samples (30 male and 30 female) were collected in each age group. The overall mean value of OCT and GGT were  $15.4 \pm 0.30$  U/l (5-35U/l) and  $32.56 \pm 1.20$  U/l (15-59 U/l) respectively. The mean values of OCT and GGT were significantly ( $p=0.05$ ) higher during hot than respective moderate ambient temperature mean value. The mean values of OCT and GGT were significantly ( $p=0.05$ ) lower during cold than respective moderate ambient temperature mean value. The sex effect was significant ( $p=0.05$ ) on the activities of serum OCT and GGT, the mean values being higher in male animals than female animals. The age effect was also significant ( $p=0.05$ ) for the activities of serum OCT and GGT, but the mean values were highest in animals of 2.5-4 Years of age. The present study may be the first to establish comprehensive values of certain serum enzymes viz. OCT and GGT of hepatic functions in Marwari breed of goat.