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Relationship of Different Body Weight on Some Biochemical Parameters Gender, Metabolic Hormones of Blood Serum in Female Arabi Sheep

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ABSTRACT

This study was conducted in the animal field of the research station of the College of Agriculture - University of Basrah, where 24 Arabi females' sheep were randomly selected and divided into 3 weight groups 26-15, 27-38 and above 39 kg. Blood samples were taken from the jugular vein and centrifuged to separate blood serum to study the effects of body weight on some biochemical parameters (cholesterol, total protein, glutamic oxaloacetic transaminase (GOT), glutamate-pyruvate transaminase (GPT) and alkaline phosphatase (ALP) enzymes) and some sex hormones (estrogen, progesterone, follicle-stimulating hormone (FSH) and luteinising hormone (LH) and metabolic hormones (growth hormone, insulin-like growth factor 1 (IGF-1) and leptin). The results showed a significant increase ($P<0.05$) in the concentration of cholesterol, total protein and ALP enzyme in blood serum when body weight increased. There was also a significant increase in the concentration of sex hormones and some metabolic hormones when body weight increased from 15 to more than 39 kg. Growth hormone did not show a significant difference compared to other weight groups. While the level of IGF and leptin increased for the 27-38 and above 39 kg groups compared to the 26-15 Kg group.