

## عنوان مقاله:

Variations of Energy Related Biochemical Metabolites During Periparturition Period in Fat-Tailed Baloochi Breed Sheep

## محل انتشار:

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## خلاصه مقاله:

Negative energy balance in pregnant ewes during last two month of gestation could result in fatal pregnancy toxemia and affects ewe and lamb health. The understanding of variations of energy related metabolites during this critical period may cast light upon to a better management of the situation. This study describes the variations of serum energy related biochemical metabolites at a period of 45 days before to 21 days after parturition in Baloochi breed ewes. Blood from the jugular vein was collected from each sheep at days 45, 30, 20, 10, 1 prior to parturition, and days 4, 7, 13, 19 and 21 post-partum to determine total protein, albumin, urea, cholesterol, glucose, triglyceride, aspartate aminotransferase (AST), -Hydroxybutyrate (BHBA) and non-esterified fatty acid (NEFA). NEFA and BHBA concentrations reached peak levels at parturition. However, AST activity had highest levels at the first and second week after lambing. AST activity significantly correlated to energy metabolism indicators. This enzyme had positive significant correlations with NEFA and BHBA and negative correlations with cholesterol and triglyceride. NEFA concentrations had a positive correlation with BHBA and negative correlation with glucose and cholesterol. At pre-partum period NEFA correlation with BHBA and AST were stronger than post-partum. This finding indicates that NEFA testing at pre-parturition days is a reliable predictor of fat mobilization and energy status of pre-parturition period in sheep. Urea and total protein concentrations reached lowest levels at parturition and then gradually increased afterwards

## کلمات کلیدی:

Fat tailed sheep, pregnancy, negative energy balance, energy metabolites

## لینک ثابت مقاله در پایگاه سیویلیکا:

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