Oxidantantioxidant Status in Calves Supplemented with Green Tea Extract

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Abstract : The objective of the present study was to investigate the effect of green tea extract on serum oxidant and antioxidant profile, liver and kidney function. 40 Friesian calves are included in this study and allocated into two groups: Group I (n=20) clinically healthy calves showing no clinical abnormalities, not receiving any treatment and served as control; group II (n=20) received green tea extract (GTE) for 30 days. Non-significant changes in blood urea nitrogen (BUN) were detected between groups, on contrary, serum creatinine and activities of liver enzymes aspartate transaminase (AST) and alanine transaminase (ALT) were significantly different between two groups. There were significant increases in the mean values of serum antioxidative parameters (total antioxidant capacity, catalase, superoxide dismutase, reduced glutathione and glutathione peroxidase) in group II. Whereas, the activity of lipid peroxidase significantly decreased in GTE treated calves when compared to control.

Keywords : green tea extract, antioxidants, oxidants, calves

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