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# Superoxide dismutase activity as a measure of hepatic oxidative stress in cattle following ethionine administration.

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## Abstract:

The goal of this study was to assess if oxidative stress, as measured by alterations in the concentrations of antioxidant enzymes in the liver and erythrocytes of cattle, could be induced following dl-ethionine administration. Whole blood, serum and liver biopsy samples were collected 0, 4, 7 and 10 days after intra-peritoneal ethionine administration to five cows. The activities of the antioxidant enzymes copper zinc superoxide dismutase (Cu, Zn SOD) and catalase were assessed in the liver biopsies which were also examined histopathologically. Significant increases in hepatic Cu, Zn SOD concentrations (P

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