

Lead acetate toxicity on glucose level and liver enzymes ameliorated by camel's milk in Wistar albino rat

Marwan M Draid, Mujahed O Bushwereb and Shadia G Ramadan
University of Tripoli, Libya

The present work was conducted to investigate the effects of lead acetate intoxication on glucose and liver functions in albino rats, and the possible effectiveness of using camel milk to protect against lead induced toxicity. Eighteen male albino rats were divided into 3 groups of six. The first was a control group, the second received lead acetate in water orally (2 ml saline containing 5 mg/Kg body weight of lead acetate) and the third received the same lead acetate dose supplemented with 2 ml of camel milk. This experiment lasted for three weeks. The results indicated that exposure of animals to lead acetate caused a significant increase ($p<0.05$) in the activities of aspartate aminotransferase (AST) and decrease ($p<0.05$) in the alanine aminotransferase (ALT) compared with control group. Treatment with camel milk seemed to offer a marked improvement of the blood glucose parameter and the liver enzymes compared with lead acetate group. The parameters were reversed towards the normal values significantly. The ability of camel milk to reduce lead toxicity may relate to its antioxidant actions or enhancing the metal chelating action. In conclusion, supplementation of daily diets with camel milk may be recommended to improve the body in case of lead contamination.

m.draid@uot.edu.ly
marwan8972@yahoo.com