

chronic diseases that threaten human health. The objective of this study was to evaluate the antidiabetic effect of camel milk and probiotics on serum profile and histology of selected organs in alloxan induced diabetic mice and characterization of camel milk. This experiment was conducted of six groups; Negative Control (NC-Normal), Positive Control (PC-Diabetic untreated), Standard Control (SC-Metformin treated), Low Dose Camel Milk (LDCM-20ml/kg/day), High Dose Camel Milk (HDCM-40ml/kg/day), Probiotic (*Enterococcus faecium* & *Lactobacillus acidophilus*). The mice groups were administered orally with respective doses for consecutive 30 days. Weekly blood glucose was measured. Mice were euthanized on day 30 to collect: blood serum and selected organs for histology. Biochemical assay of Liver Function Test (LFT), Renal Function Test (RFT) and histological study of liver, kidney and pancreas were performed for determination of protective role of different treatments. The LFT showed the significant reduction in bilirubin and ALP level after treatment with HDCM and probiotic when compared with PC. The RFT results showed the manageable range of urea and creatinine. Hence, camel milk has potential to recover elevated blood glucose, hematological parameters and degenerative changes in liver, kidneys and pancreas and also the probiotics have a beneficial effect in diabetic animals and could be used as a supporting alternative in the disease treatment.