**ABSTRACT**

Oxidative stress is one of the basic factors in the ethology of the various complications associated with diabetes. The present study was aimed to investigate the antioxidant properties of Triphala during diabetes mellitus. Four groups of Wistar Rats were employed namely Normal, Diabetic control, Diabetic + Triphala (200 mg/kg) and Diabetic + Triphala (400 mg/kg). The oxidative stress was assessed by measuring the lipid peroxidation, enzymatic superoxide dismutase and catalase. Following the induction of diabetes the enzymatic antioxidants were significantly reduced with concomitant increase in LPO. Administration of Triphala (200 mg/kg body weight and 400 mg/kg body weight) for 10 days showed a dose dependent attenuation of the LPO and dose depended amelioration of the levels of SOD and CAT. So the study revealed that Triphala supplementation significantly prevents the diabetes induced oxidative stress which may be due to its antioxidant properties.

**Keywords:** Oxidative stress, diabetes**,** lipid peroxidation, enzymatic antioxidant properties.