



## Protective role of turmeric extract (*Curcuma longa*) in the lipid profile and activity of antioxidant in the male rats treated by lithium carbonate

Afyaa S. Nasir\*, Haider S. Jaffat

Science Faculty, University of Kufa, Najaf, Iraq

**Abstract:** The antioxidant effect of turmeric (*Curcuma longa*) extract against side effects induced by lithium carbonate ( $\text{Li}_2\text{CO}_3$ ) were studied. The experiment was carried out on fifty male rats distributed randomly into 5 groups of 10 animals in each group. The (1) group was kept as a normal control was received normal saline, rats of group (2) and (3) were given only lithium carbonate only in a dose 4 and 8 mg/kg for induction of oxidative state on rats, While other groups (4) was received lithium carbonate at dose 4 mg/kg with turmeric extract at dose 1 g for 1 kg of diet and groups (5) was received lithium carbonate at dose 8 mg/kg with turmeric extract at dose 1 g for 1 kg of diet. Results showed that oral administration of turmeric extract in rats with oxidative state by  $\text{Li}_2\text{CO}_3$  decrease the lipid profile parameters and increase antioxidant enzymes. Conclusively: treatment by turmeric extract was produce a protective effect against oxidative stress by  $\text{Li}_2\text{CO}_3$  in the male rats.

**Keywords:** lithium, lipid profile, lipid peroxidation, glutathione peroxidase, superoxide dismutase, male rat.

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