

## Black tea extract improves antioxidant profile in experimental diabetic rats

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In Indian traditional system of medicine, herbal remedies are prescribed for treatment of various diseases including diabetes mellitus. In recent years, plants are being effectively tried in a various pathophysiological states. Recent evidence suggests that tea from *Camellia sinensis* (eg, green, oolong, and black tea) may have a hypoglycemic effect. We evaluated the ability of an extract of black tea to improve glucose control over a 35 days period. Oxidative stress plays a pivotal role in the development of diabetes complications, leading to the peroxidation of lipid and protein oxidation molecules and found great alteration of antioxidants in diabetic rats. Black tea, known for its antioxidant properties, the present study evaluated the antidiabetic effects from aqueous extracts of black tea in normal and alloxan-induced diabetic rats. The black tea treated alloxan induced diabetic rats showed significant hypoglycemic activity for 35 days and significantly decreased the serum glucose, total cholesterol, triglycerides, creatinine, and alkaline phosphatase, while it increased the antioxidant value in terms of FRAP in diabetic rats. A comparison was made between the action of aqueous black tea extracts and alloxan induced diabetes, a known black tea act as antidiabetic drug.

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