

**EFFECT OF GREEN TEA ON LIVER ENZYMES IN RAT
HEPATIC FIBROSIS MODEL**

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Background and aims: Green tea is a popular beverage in the world, especially Asia. Beneficial effects of it have studied in the prevention and treatment of diseases. There are few studies about impact of green tea on hepatic diseases, thus we decided to investigate its impact on liver fibrosis.

Methods: Forty male wistar rats were randomly divided into five groups: control group, GTE (green tea extract) group that received GTE powder dissolved in distilled water at doses of 125 mg/kg body weight orally for four weeks, fibrosis group, that was injected carbon tetrachloride (CCl₄) 1ml/kg/IP (diluted in corn oil), 3 times per week for 4 weeks, GTE+CCl₄ group that received GTE and CCl₄ at the same time and corn oil group was administered corn oil 1 mL/kg body weight three times a week for four weeks. In the end of study, the rats were sacrificed to measure serum aspartate aminotransferase (AST), alanine aminotransferase (ALT) and alkaline phosphatase (ALP).

Results: The fibrosis group showed an increase in ALT, AST and ALP levels in comparison with the control group ($P < 0.01$). Green tea reduced all of enzymes in fibrosis model significantly ($P < 0.05$). GTE and corn oil had no effect on the enzymes in normal conditions.

Conclusion: According to obtained results, GTE decrease liver enzymes in situations fibrosis. So it is suggested that the use of green tea can be useful in reduction of liver injuries.