

Hepatoprotective activity and antioxidant effects of El Nabka (*Zizyphus spina-christi*) fruits on rats hepatotoxicity induced by carbon tetrachloride

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Abstract :

The present study was designed to evaluate the protective effect of the El Nabka (*Zizyphus spina-christi*) fruits as an antioxidant against carbon tetrachloride (CCL₄) induced oxidative stress and hepatotoxicity in Albino Wistar rats was investigated. Subcutaneous injection of CCL₄, produced a marked elevation ($P < 0.05$) in the serum levels of aspartate transaminase (AST), alanine transaminase (ALT) and alkaline phosphatase (ALP). Daily dietary containing powder of ZSCF at 2.5, 5, 10, and 15% of basal diet for 6 weeks produced a reduction in the serum levels of liver enzymes. ZSCF has also restored normal levels of malondialdehyde and retained control activities of endogenous antioxidants such as Superoxide Dismutase (SOD), and Glutathione Peroxidase (GSH). Therefore, it is concluded that ZSCF can protect the liver against CCL₄-induced oxidative damage in rats, and the hepatoprotective effect might be correlated with its antioxidant and free radical scavenger effects. [Heba Ez. Youssif, Abeer A. Khedr and Mohamed Z. Mahran. Hepatoprotective and antioxidant effects of *Zizyphus spina-christi* fruits on carbon tetrachloride induced hepatotoxicity in rats. *Nature and Science* 2011;9(2):1-7]. (ISSN: 1545-0740). <http://www.sciencepub.net>.

Key Word :

Zizyphus, hepatotoxicity, antioxidants- and malondialdehyde

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