**Antioxidant effects of walnuts on malondialdehyde levels raised by lead toxicity in mice**

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**ABSTRACT**

**Objective:** To evaluate the antioxidant effects of walnuts on raised levels of Malondialdehyde (MDA) by lead toxicity.

**Study Design**: Quasi Experimental study

**Place and Duration**: Department of Biochemistry, ANMCH, Islamabad, Pakistan in collaboration with National Institute of Health Islamabad. The duration of the study was six months from November, 2015 to April, 2016

**Methodology:** A total of 60 BALB/c mice were divided into three groups of 20 mice each. Group Ι was given normal standard diet. Group ΙΙ was given lead acetate in drinking water with normal diet without any supplementation. Group ΙΙΙ was given lead acetate with diet supplemented with walnuts. Levels of malondialdehyde were measured by using Thiobarbituric acid reactive substances (TBARS) method at the end of study.

**Results:** The data obtained from this study indicates that lead caused increase in serum Malondialdehyde (38.06±2.99.) levels in group ΙΙ. Supplementation of walnut along with lead showed decrease in serum malondialdehyde levels (7.91±2.23) in group ΙΙΙ as compared to group ΙΙ.

**Conclusion:** Walnuts are rich in antioxidants and prevent against the lead induced oxidative stress by decreasing serum Malondialdehyde levels

## Keywords: Lead Poisoning, Malondialdehyde, Walnuts

**How to Cite This:**

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