

FULL TEXT LINKS



[Food Chem Toxicol.](#) 2009 Aug;47(8):2031-6. doi: 10.1016/j.fct.2009.05.021. Epub 2009 May 27.

Hepatoprotective effect of electrolyzed reduced water against carbon tetrachloride-induced liver damage in mice

[Chia-Fang Tsai](#)¹, [Yu-Wen Hsu](#), [Wen-Kang Chen](#), [Wen-Huei Chang](#), [Cheng-Chieh Yen](#),
[Yung-Chyuan Ho](#), [Fung-Jou Lu](#)

Affiliations

PMID: 19477216 DOI: [10.1016/j.fct.2009.05.021](#)

Abstract

The study investigated the protective effect of electrolyzed reduced water (ERW) against carbon tetrachloride (CCI(4))-induced liver damage. Male ICR mice were randomly divided into control, CCI(4), CCI(4)+silymarin, and CCI(4)+ERW groups. CCI(4)-induced liver lesions include leukocytes infiltration, hepatocyte necrosis, ballooning degeneration, mitosis, calcification, fibrosis and an increase of serum alanine aminotransferase (ALT), and aminotransferase (AST) activity. In addition, CCI(4) also significantly decreased the activities of superoxide dismutase (SOD) and glutathione peroxidase (GSH-Px). By contrast, ERW or silymarin supplement significantly ameliorated the CCI(4)-induced liver lesions, lowered the serum levels of hepatic enzyme markers (ALT and AST) and increased the activities of SOD, catalase, and GSH-Px in liver. Therefore, the results of this study show that ERW can be proposed to protect the liver against CCI(4)-induced oxidative damage in mice, and the hepatoprotective effect might be correlated with its antioxidant and free radical scavenging effect.

Related information

[MedGen](#)

[PubChem Compound](#)

[PubChem Compound \(MeSH Keyword\)](#)

[PubChem Substance](#)

LinkOut - more resources

Full Text Sources

[Elsevier Science](#)

Medical

[MedlinePlus Health Information](#)