



کد اختصاصی همایش
97181-21-2

راصدین

دانشگاه علوم پزشکی تهران

دانشگاه تهران

FANBAZAR

جمهوری اسلامی ایران

The 2nd International Conference on
Medicinal Plants, Organic Farming,
Natural and medicinal materials

دومین کنفرانس بین المللی

گیاهان دارویی، کشاورزی ارگانیک

مواد طبیعی و دارویی

۲۲ اسفند ماه ۱۳۹۷ - مشهد مقدس

The effects of Cinnamon extract on lead detoxification in renal parameters of female rats

Fereshteh Dadfar¹, Habibollah Johary²

Departement of Biology, Payame Noor University, Tehran, Iran

, Departement of Biology, Islamic Azad University, Drab Branch, Darab, Iran

Abstract

Background: Environmental lead exposure continues to be a public health problem. The kidney is one of organs that is exposed to the side effects of lead. Cinnamon contains large amounts of phenol antioxidants that has protective effects against free radicals. This study investigated the antioxidant effect of cinnamon on renal parameters.

Materials & Methods: In this experimental study, thirty-five wistar female rats were divided into 7 groups of 5 each: control group received no treatment, sham group (0.2 ml saline normal), third group (0.5 g/kg of cinnamon extract), fourth group 3 (0.6 g/l lead acetate), and fifth group (0.6 g/l lead acetate in addition to 0.5 g/kg cinnamon extract). At the end of the study, BUN, creatinine and uric acid concentrations were measured. **Results:** The results showed that the concentration of BUN, creatinine and uric acid had significant increased in lead group compared to the other groups ($p < 0.05$). The cinnamon reduced these parameters significantly when used with lead. **Conclusion:** It can be concluded that cinnamon extract with its antioxidant properties reduces the side effects of lead on mean concentrations of renal physiological parameters.

Keywords: Cinnamon, Lead, Kidneys, Uric acid, Creatinine, BUN.

1. Corresponding Author: fereshteh Dadfar