

Effect of Wheat Sprout Extract on Changes in Ovarian Sex Hormones in Rat Exposed to Lead

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Abstract

The effects of lead toxicity, even at low levels, have several disabilities, such as weakness, impaired ability and intellectual behavior of children, loss of hearing and vision, reduced sperm quality and fertility in women. On the other hand, treatments by medicinal herbs such as wheat germ, which is rich in antioxidants such as E, thiamine, zinc, phenolic acids, alkylaryosuronquids, aminophenols, and aminobenzoic acids, can be considered. Thirty adult male Wistar rats (240 ± 20 g) were divided in 6 groups: control (without treatment), 10 mg lead, hydroalcoholic extract of wheat germ with doses of 100 and 200 mg, lead in conjunction with hydroalcoholic extract of wheat germ with Doses of 100 and 200 mg were divided. On day 36, blood samples were taken and the antioxidant properties of the LH and FSH hormones and estrogen levels were evaluated. Rat weight and ovarian weight decreased in the induction group with a dose of 10 mg. Also, the concentration of estrogen, LH and FSH and antioxidant activity in the lead group decreased with different amounts, and in the hydroalcoholic extract group, wheat germ increased. Hydroalcoholic extract of wheat germ can compensate for lead-induced lesions, which depends on the dose of prescription.

Key words: Wheat sprout, Sex Hormones, Lead, Ovary, Rat

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