

**Abstract of the DVM thesis No. 12563, Faculty of Veterinary Medicine, Urmia University.**

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**Title of thesis: Serum Vitamin D, Calcium & phosphate status in mice with chronic intoxication of p,p-Isopropylidenebisphenol.**

Isopropylidene bisphenol is one of the oldest high molecular weight synthetic compounds known for its endocrine activity. Isopropylidene bisphenol is currently widely used as a raw material for epoxy resins coating food and beverage containers and as a monomer in polycarbonate and plastics made of polysulfone in many consumer products, including medical and dental devices and Industrial products such as plastics, thermal stabilizers, insecticides, paints and sales invoices are used. The data have raised concerns about the possible influence of isopropylidene bisphenol in the etiology of various human diseases.

In this study, the effect of isopropylidene bisphenol on the levels of vitamin D, calcium, phosphorus, urea, creatinine, and ALP in the blood serum of mice was investigated. For this purpose, 45 mice of both sexes were divided into 2 groups, the first group included 20 mice and the second group included 25 mice. The first group received a regular diet and distilled water to measure the basic parameters, and for the second group, isopropyl diphenol was dissolved in absolute ethanol at a rate of 100 mg/ml and diluted 1:100 with ethanol and with a concentration of 0/1 mg/liter was given to mice for 8 weeks and at zero, first, second, fourth and eighth weeks, 5 mice from this group were killed and blood and heart tissue samples were collected.

Isopropylidene bisphenol caused a significant decrease in vitamin D, calcium and phosphate in the blood serum of mice and a significant increase in urea, creatinine and ALP compared to the control group. Based on the findings of the present study, it seems that isopropylidene bisphenol causes abnormalities in bone tissue and kidney failure, as well as interfering with liver activity.

**Keywords: Vitamin D, Calcium, phosphate, mice, Chronic intoxication, p,p-Isopropylidenebisphenol.**