



Journal

J. Biol. Chem.

Environ. Sci., 2017,

Vol. 12(1): 67-90

www.acepsag.org

PROTECTIVE EFFECT OF DRY FIG AND BLUEBERRY FRUITS AGAINST LEAD TOXICITY IN RATS

Ereny Wilson Nagib

*Department of Home Economic, Faculty of Specific
Education, Ain Shams University, Cairo, Egypt.*

ABSTRACT

This study was carried out to determine the effect of dry fig (*Ficus carica L.*) and dry blueberry (*Vaccinium corymbosum*) against lead toxicity in weaning rats. Forty growing male albino were divided into two main groups. The first group was the negative group (8) rats, the second group (32) rats was administered to lead acetate and divided into four groups. The subgroup is one positive group fed basal diet, the subgroup two fed basal diet containing (15%) dried fig, the subgroup three fed basal diet containing (15%) blueberry, the subgroup four fed basal diet containing (15%) combination of (fig and blueberry) for (6) weeks.

At the end of the experimental period the best result found in group fed basal diet containing (15%) combination fig and dry blueberry since they improved daily food intake, body weight gain, feed efficiency ratio, hemoglobin and serum iron level. Moreover, lead concentration was decreased in serum and also it was improver of that concentration of calcium, phosphorous as well as lead in bone of intoxicated rats. Dry fruits were improved liver enzymes and kidney functions compared with positive group.

The histopathology results agreed with the results of serum parameters. These results recommend increasing the feeding of fig and blueberry fruits. Nutrition Education Programs are needed to illustrate the importance of dried fig and blueberry in reducing lead toxicity.

Key words: dry blueberry, dry fig, lead toxicity.