## **ABSTRACT**

## THE EFFECT OF APPLYING THE VITAMIN C TO THE HISTOPATHOLOGY LIVER OF THE MICE (Mus Musculus L) THAT IS INDUCTED BY MONOSODIUM GLUTAMATE

By

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Monosodium Glutamate (MSG) is a food flavor enhancer that is improving the overall taste of certain foods and often used around the world and is the free radicals that can damage liver cells. Vitamin C is an antioxidant that counteracts the effects of MSG radicals free. The purpose of this study is to determine the effect of vitamin C on hepatic histology of adult male mice that is induced by Monosodium Glutamate.

The subject of this study were the 25 adult male mice tails DD Webster strain, which were randomly divided into 5 groups: K (-) (4mg/grBB MSG), K (+) (0.2 mg vitamin C / grBB), P1 (MSG 4 mg / grBB and vitamin C 0.07 mg / grBB), P2 (4 mg MSG / grBBdan vitamin C 0.2 mg / grBB), P3 (4 mg MSG / grBB and vitamin C 0.6 mg / grBB) after 15 days treatment and was calculated on the amount of fatty degeneration of the liver of those mice. Data Analysis of the test was one-way ANOVA followed by post hoc analysis test by the method of LSD and Kruskal Wallis test sustained by Mann Whitney test.

The obtained result after MSG applying and the vitamin C provision have reduced the amount of fatty degeneration of the mice liver in which P <0.05. This indicated that applying of MSG and vitamin C affected the mice liver histopathology.

**Key words**: monosodium glutamate, vitamin C, liver, fatty degeneration, mice