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INHIBITORY EFFECT OF FLAVONES AGAINST CADMIUM INDUCED CYTOTOXICITY.

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This study was carried out to develop the antitoxic compound about cytotoxicity of cadmium on NIH 3T3 fibroblasts. These cells divided into 3 groups: control groups (cadmium only) or MTT50 group (NIH 3T3 fibroblasts, 53.32 µM cadmium) and experimental group (53.32 μ M quercitrin and 54.72 μ M quercetin). MTT assay was performed to evaluate the cytotoxicity of cell organelles. The light microscopic study was carried out to morphological changes of caltured NIH 3T3 fibroblasts. The results indicated that guercitrin showed detoxification effect on cytotoxicity of cadmium in quercitrin 53.4 μ M and 54.72 μ M quercetin. According to the spectroscopic of 1: 1 complex of cadmium and guercitrin, it showed that this formation of complex eliminated cadmium from NIH 3T3 fibroblasts.

Keyword: Cadmium, Quercetin, Quercitrin

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