

Comparative Analysis of the Cytotoxic Effect of Flavonoid-Containing Plant Extracts on the CHO Cell Line

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Using the MTT test, different viability and metabolic activity of the multi-layered CHO cell line was established when exposed to extracts of *Helichrysum arenarium* (L.) Moench, *Gratiola officinalis* L., *Zea mays* L. The use of extracts in concentrations from 50 to 250 µg/ml resulted in an increase in the number of viable cells (up to $86.0 \pm 8.2\%$) and stimulated their metabolic activity (up to $196.1 \pm 8.8\%$). The use of extracts in concentrations from 500 to 2000 µg/ml resulted in a decrease in the number of viable cells (up to complete cell death) and inhibition of metabolic activity (up to $13.4 \pm 11.3\%$). The studied plant extracts of *Helichrysum arenarium*, anthocyanin form of *Zea mays* and *Gratiola officinalis* showed different effects on healthy cells, depending on the concentration used.

Keywords: CHO, cytotoxicity, MTT test, *Helichrysum arenarium* (L.) Moench, *Gratiola officinalis* L., *Zea mays* L.