



## Abstract

# The Effect of Tocopherol- $\alpha$ on the Cell Viability in Caco-2 Cell Line <sup>†</sup>

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**Abstract:** Tocopherols, the major forms of vitamin E, are a family of fat-soluble phenolic compounds. Each tocopherol contains a chromanol ring system and a phytyl chain containing 16 carbons. Tocopherols, as effective antioxidants, have been proposed to protect against carcinogenesis. Colon carcinoma cell line were treated with tocopherol- $\alpha$  (0, 3.12, 6.25, 12.5, 25, 50, 100, 200  $\mu$ M). Cell viability and migration were examined. Cell viability was determined MTT assay and cell migration was determined by wound healing assay. Caco-2 cells were treated with for 24 h, 48 h and 72 h incubation. There is a significant decrease was observed at 50, 100 and 200  $\mu$ M for 48 h and 72 h incubation on cell viability in the MTT assay. Wound healing method observed decrease on migration at 12, 5, 25 and 50  $\mu$ M in 24 h. These results suggest that tocopherol- $\alpha$  have promising antiproliferative effect on cell viability for research on cancer.

**Keywords:** Antiproliferative effect; Caco-2 cell line; tocopherol- $\alpha$ .



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