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Title: Crocins from *Crocus sativus* L.: a precious nutritional source as an agent against a medulloblastoma human cell line

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Medulloblastoma is the most common Central Nervous System malignant brain tumor in children. Treatment usually includes surgery followed by radiation, chemotherapy, or both. Retinoid therapy is recommended for the treatment of medulloblastoma. Although the significant benefit derived from the use of these compounds, systemic administration is associated with chronic toxicity which leads to sublethal or even lethal results. Therefore, their use is limited.
As a result, scientists are in pursuit of new therapeutic approaches. *Crocus sativus* L. is a species belonging to the Iridaceae family. The dried stigmas of the plant, commonly known as saffron, have been used as spice, food coloring and flavoring and in traditional herbal medicine by many ancient civilizations. Nowadays there is an increasing interest in the use of the traditional medical knowledge regarding saffron activity against a wide range of human diseases. The pharmacological efficacy of the stigmas is attributed to crocins, the main constituents of saffron. Crocins are either mono- or di-glycosyl esters of crocetin, in which D-glucose and/or D-

gentiobiose occur as carbohydrate residues. They are water soluble carotenoids with relatively low toxicity as they are not stored in adipose and liver tissues [1, 2].

In this study we examined the possible cytotoxic effect of crocins on the paediatric malignant cell line TE-671. Results of our research could encourage the use of natural products to prevent and/or treat various diseases.

Biography

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