



The 3rd International Gastrointestinal Cancer Congress



The anticancer properties of saffron

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Abstract:

Introduction: Since cancer is the most common cause of death in the world population, the possibility that readily available natural substances from plants, vegetables, herbs, and spices may be beneficial in the prevention of cancer warrants closer examination. Saffron is a spice derived from the flower of the saffron crocus (*Crocus sativus*) plant native to Southwest Asia. It has historically been the world's most expensive spice per unit weight. Chemical analysis has shown the presence of more than 150 components in saffron stigmas. The more powerful components of saffron are crocin, crocetin and safranal. Studies in animal models and with cultured human malignant cell lines have demonstrated antitumor and cancer preventive activities of saffron and its main ingredients, possible mechanisms for these activities are discussed.

Method: In this study, possible anti-cancer properties of saffron were investigated in a library based study using the published articles in scientific databases like PubMed, google scholar

Results: Crocetin affects the growth of cancer cells by inhibiting nucleic acid synthesis, enhancing anti-oxidative system, inducing apoptosis and hindering growth factor signaling pathways.

Conclusion: saffron and its ingredients could be considered as a promising candidate for clinical anticancer trials.

Key words: saffron, cancer, crocetin