The Janus Corner

Looking Back

Looking Forward

This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinals—both ancient and modern.

What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

Ginger May Assist in the Prevention of Colon Cancer

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A recent study published in Cancer Prevention Research has highlighted the potential of ginger (Zingiber officinale) in the prevention of colorectal cancer.11 It was reported that ginger root extract inhibited the enzyme cyclo-oxygenase (COX) which is involved in the production of inflammatory eicosanoids, and particularly of prostaglandin E2 (PGE2). This is a significant finding as previous studies have linked the up-regulation of PGE2 with the events associated with the early development of colorectal cancer.12 It has previously been shown that ginger extracts can down-regulate COX in cultured cell lines13 and has also been linked to lowering the incidence of colon cancer in rats.14 The recent Cancer Prevention Research study tested the effects of a daily dose of ginger extract on the levels of PGE2 and other important eicosanoid biomarkers in healthy human volunteers as an indicator of cancer prevention. A significant decrease in the levels of PGE2 and 5-HETE, as well as a trend towards significant decreases in 12-HETE and 15-HETE were observed when normalised to free arachidonic acid. The authors conclude that ginger extract may decrease eicosanoid levels in colorectal cells by inhibiting their synthesis from arachidonic acid and may therefore be beneficial for individuals with a high risk of colorectal cancer. Further research is warranted.

REFERENCES


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