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Review article

## Molecular mechanisms of curcumin and its analogs in colon cancer treatment

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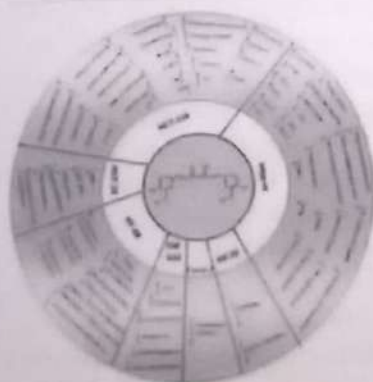
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## Abstract

Colorectal cancer remains to be the most prevalent malignancy in humans and 1.5 million United States are diagnosed with colorectal cancer, with a predicted 145,600 new cases and its synthetic analogs are now of interest due to their bioactive attributes, especially various cancer cell line models. Several *in vivo* and *in vitro* studies have substantially proven various cancer cell lines. Curcumin analogues like IND-4, FLLL, GO-Y030 and C086 have cytotoxicity when experimentally studied and study results from many have been suggested curcumin with therapeutic cancer agents like tolfenamic acid, 5-fluorouracil, resveratrol cytotoxicity and chemotherapeutic effect. The results propose that employment of curcumin like liposome, micelles and nanoparticle have been performed which could improve the cancer. The present review highlights the mechanism of action, synergistic effect and therapeutic potential of curcumin.

## Graphical abstract



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