

## Review of: "Effects of Cinnamon on Cancer Prevention and Progression"

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Potential competing interests: No potential competing interests to declare.

This review provides a thorough examination of the effects of cinnamon and its derivatives in cancer prevention and progression, particularly in relation to transcription factor regulation and kinase activity. However, there is room for additional points to enhance its comprehensiveness.

- 1. In addition to their dose-dependent effects, cinnamon extracts also exhibit significant time-dependent and cell-specific properties in regulating cell proliferation. This point highlights the importance of considering both the duration of exposure and the specific cellular context in therapeutic applications.
- 2. It would be beneficial to delve further into the induction of apoptosis in cancer cells through activation of intrinsic apoptotic pathways, emphasizing the critical role of caspases. Additionally, a deeper exploration is warranted into how cinnamon derivatives augment the cytolytic activity of CD8 cells and influence mitochondrial potential for apoptosis induction.
- 3. Provide some information on the impact of CE (specifically eugenol) on suppressing the AKT and STAT3 pathways.
- 4. Further information is needed to provide on the effect of CE (specifically BCA) in suppressing tumor growth and formation through the down-regulation of ROS scavengers like metallothionein1/2 and induction of cell cycle arrest.

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