

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

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Potential competing interests: No potential competing interests to declare.

Title: Effects of Cinnamon on Cancer Prevention and Progression

General comments

Major revision is required

The abstract provides an overview of the potential role of cinnamon in cancer prevention and treatment, highlighting various biologically active components of cinnamon and their potential mechanisms of action against cancer. The discussion covers the modulation of transcription factors, kinase activity, and other pathways involved in tumor progression and angiogenesis.

However, I will suggest the following points to be included in the manuscript.

- Add at least two tables and graphs (describing type of cancer, type of cinnamon, methods, and mechanisms of action)
- Add the molecular structure of bioactive compounds
- Reduce the citations; for a single paragraph, sometimes the authors cite four sources
- Add references; some paragraphs and statements are without citation
- There are plenty of errors in grammar. Please fix the grammatical faults.

Abstract

1. The abstract effectively summarizes the current research on cinnamon's potential anticancer properties. I suggest adding some statements about the use of nanoparticles in cinnamon and drawing more conclusions.
2. Please add at least four keywords.
3. In the introduction section, the authors wrote, "Cinnamon is one of the oldest known spices and has been used medicinally," and in Section 2, they explain, "Cinnamon is a natural aromatic carboxylic acid containing an acrylic acid group allowing cis or trans configuration." Is cinnamon a pure compound, or a mixture of spices?
4. I recommended that the authors enhance the objective of the paper.
5. The author writes, "recently, cinnamon has been studied for its anti-cancer effects that likely stem both from its chemical composition" What does stem mean? Please rewrite the statement.
6. The introduction is not written in a good way. It does not include information and ideas in an organized manner, which is why the title is selected for review. Please elaborate on the gap. There are so many plants used as anticancer

actives that you specifically selected this plant, so give enough information in the introduction part.

7. In section two, I advise the authors to focus on explaining bioactive compounds isolated from the plant in different areas with different solvents and to draw their structures.
8. The biologically active cinnamon compounds “cinnamic acid, cinnamyl acetate, coumarin, and caffeic acid are also important components. Please add more active compounds from the plant used to treat cancer, with their structures.
9. Remove “Polyphenolic compounds such as these found in cinnamon have been studied for their anticancer potential in a number of pathways and transcription factors, including the NF-kB and Nrf2 transcription factors and signaling pathway MAPK,” from section 2 and add it to section 3.
10. Remove “Within many studies, cinnamaldehyde has been used to contribute to apoptosis in cancer cells by acting on different mechanisms [13][17]. A study conducted by Liu et al. screens targets for cinnamon in the treatment of breast cancer and explores therapeutic mechanisms [13]” from section two and add it to section 3.
11. I suggest that authors need to revise the use of italics in the text, especially in words such as *in vitro*.
12. The author explains two important points for cinnamon's prevention of cancer: the first is it positively affects the microbiome, and the second is it reduces inflammation overall. It is a good idea, but the paragraphs don't explain well how the reduction in inflammation due to cinnamon reduces cancer. Add more methods used to prevent cancer, such as the antioxidant and antimicrobial effects due to cinnamon.