

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

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**Potential competing interests:** No potential competing interests to declare.

## Overall comments

- The manuscript titled "Effects of Cinnamon on Cancer Prevention and Progression" provides a comprehensive review of the potential anticancer properties of cinnamon.
- The manuscript is well-organized with clear sections that systematically address different aspects of cinnamon's potential anticancer effects. Each section flows logically from the introduction to the conclusion.
- The review is thorough and covers a wide range of studies and mechanisms by which cinnamon and its components may affect cancer. This depth is commendable.
- The manuscript is generally clear, but there are areas where sentence structure can be improved for better readability. Avoid overly complex sentences that might confuse readers.

## Specific Comments

- The abstract is well-written but could be more concise. Focus on the main findings and implications to provide a quicker overview for readers. Ensure that all major points discussed in the manuscript are briefly mentioned in the abstract.
- The introduction effectively sets the stage by discussing the historical use of cinnamon and the controversy surrounding its medicinal properties. However, the transition from diabetes to cancer research could be smoother. Consider a linking sentence to better connect these two areas.
- The Biologically Active Compounds section provides a good overview of the active compounds in cinnamon. However, the descriptions of these compounds could be more detailed, especially regarding their specific roles and mechanisms in anticancer activity.
- Including a table or figure summarizing the key compounds and their targets/mechanisms might help readers grasp the information more quickly.
- Potential Mechanisms of Action sections are well-explained but could benefit from more detailed explanations of the pathways themselves before discussing how cinnamon affects them.
- The discussion on Nrf2 is balanced and highlights both the potential benefits and risks. However, some statements about the dual role of Nrf2 in cancer could use more specific examples from the literature.
- The VEGF/HIF1a Pathway section is clear and informative. Consider adding more recent studies to support the claims.
- The explanation of MAPK pathways and cinnamon's effects is good. However, it could be enhanced by providing more context on the importance of these pathways in cancer biology.

- The Microbiome and Inflammation sections are well-covered but could be expanded with more recent studies. The role of the microbiome in cancer prevention is a rapidly evolving field, and including the latest research would add value.
- The discussion on bioavailability is thorough. Including potential methods to enhance bioavailability, such as nano-formulations, is a good touch. Ensure to mention any limitations or challenges associated with these methods.
- The Future Research Directions section is strong, clearly outlining the gaps and future research needs. Emphasize the importance of clinical trials and long-term studies. The discussion on potential risks is crucial. Ensure that this section is as detailed as possible, with clear recommendations for safe usage levels based on current research.
- Review the manuscript for grammatical errors and improve sentence structure where necessary. Aim for clarity and simplicity.
- In the conclusion section, offer a forward-looking statement about the potential impact of future research on the use of cinnamon in clinical settings.