

# Review of: "[Mini Review] Role of Mango in Immune System"

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Potential competing interests: No potential competing interests to declare.

Although this article provides an interesting and well-structured review of the role of the fruit of Mangifera indica Linn on the immune system, I believe it needs some revision to make it more consistent. Some aspects to be improved are of an idiomatic nature, but others are directly related to the content. For example:

#### - Review this sentence in "Abstract":

"In this chapter "Role of Mango in Immune System" the a fascinating relationship between mango consumption and its potential effects on immune health, paying..."

- Review this sentence in "3. Basics of Immune Health":
- "According to [41], it is present from birth and offers instant defence against a variety of infections <u>Innate</u> immunity includes both chemical and physical barriers,..."

# In section "2. Nutritional Profile of Mango":

It would be interesting for the author to include in the compositional analysis of mangoes more insight into the fibre content and composition of the fruit, including the peel. Mangoes are an excellent source of dietary fibre (p.e. Galib et al, 2022<sup>1</sup>), and there is a clear link between this type of nutrient and the immune system (p.e. Cohen and Elinav, 2023). This is, in my personal opinion, something to not miss out on by the author, so I would also recommend discussing this topic in more depth in the article.

# • In section "3. Basics of Immune Health":

In my opinion, the author gives too much weight to a general description of the immune system, so my recommendation would be to synthesise this section a little more. There is perhaps an overuse of adjectives in sentences that add little content and repeat the same message. For example:

- "A healthy immune system contributes to long-term disease prevention, quicker healing, and protection against illness."
- "The <u>amazing</u> immune systems in the human body protect us from illnesses."
- "Our bodies' innate immunity serves as a quick reaction system and initial line of defence"

I would not include the following sentence in the article because, in my opinion, the way it is written does not meet the requirements of scientific language.

"<u>Get ready to find out the truth</u> about the connection between mangoes and the body's first line of defence, which is advantageous."

## • In section "3. Mango and Immune System Interaction":



Although this section is quite complete and well written, it lacks a more detailed description of the phytochemical composition of mangoes, i.e., other polyphenols besides mangiferin may have a modulating role on the immune system. For example, it is known that the polyphenolic profile of mango fruit is complex and varies according to variety, ripeness, and part of the fruit, and that the main polyphenols in all varieties are gallic acid and its derivatives, including mono-galloyl glucose, and gallotannins (hexa- to nona-O-galloyl glucosides), representing up to 95% of total polyphenols<sup>3</sup>, and that these have anti-inflammatory effects associated with the gut microbiota<sup>4</sup>. It would be good to give some weight to this in this section of the article.

Finally, it is worth noting that the author has done a good job of synthesis in this Mini Review, highlighting the value of eating this fruit as a food with layers of added value in its consumption.

#### References

- 1. Mehadi Galib, R., Alam, M., Rana, R. & Ara, R. Mango (Mangifera indica L.) fiber concentrates: Processing, modification and utilization as a food ingredient. Food Hydrocoll. Heal. 2, 100096 (2022).
- 2. Cohen, Y. & Elinav, E. Dietary fibers & immunity—more than meets the eye. Cell Res. 33, 411–412 (2023).
- 3. Kim, H. et al. Mango (Mangifera indica I.) polyphenols: Anti-inflammatory, intestinal microbial health benefits, and associated mechanisms of actions. Molecules 26, (2021).
- 4. Kim, H. et al. Intestinal Microbial Health Benefits, and Associated Mechanisms of Actions. Molecules 26, 2723 (2021).