

Review of: "Natural Polyphenols of Pomegranate and Black Tea Juices can Combat COVID-19 through their SARS-CoV-2 3C-like Protease-inhibitory Activity"

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Potential competing interests: No potential competing interests to declare.

Thank you for inviting me to review this paper. I appreciate the objectives of this journal project.

In this study, the author discusses the potential of black tea and pomegranate juice in combating COVID-19 by inhibiting the SARS-CoV-2 3C-like protease through their natural polyphenolic compounds. Previous research has shown that natural polyphenols from tea have inhibitory activity against the SARS-CoV 3C-like protease, which is related to the SARS virus. Similarly, recent studies have indicated that the novel coronavirus, COVID-19, operates through a mechanism similar to SARS. It is believed that COVID-19 accesses host cells by affecting the ACE2 enzyme, which is connected to the peplomer of the enzyme.

The authors should provide more detailed methodologies encompassing in vitro, in vivo, and in silico approaches. Additionally, they ought to compare the inhibitory activity of compounds found in black tea and pomegranate juice with standard antiviral drugs that are relevant to the study. As it stands, this review lacks sufficient information and would greatly benefit from the inclusion of computational studies exploring the interactions between the polyphenols present in pomegranate and black tea juices and various enzymes of SARS. At its current stage, the paper provides limited information.