

Peer Review

Review of: "New Insight into Erythema Reduction Induced by Quercetin–Metal Ion Chelates"

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The authors present a paper analyzing the effect of quercetin dissolved at different concentrations of 2-propanol on the resolution of skin erythema, either alone or with chelating agents such as Cu⁺⁺ or Fe⁺⁺. They performed a dissociation spectrum in UV and visible light to evaluate the structure of the complex. However, the purpose of conducting this study is not clear. They also analyze the effect of different temperatures on complex dissociation since the treatment will be applied at room temperature.

In this paper, the authors concluded that the Q-Fe combination in 80% of 2-propanol is better than the other analyzed conditions since it stabilizes the OH group of quercetin, functioning better as a free radical scavenger. However, although a Q-Cu-Fe complex was also performed, nothing was discussed. A materials and methods section is missing; it does not explain how the mixtures were made or how the Cu and Fe presentations were used to make them. Also, it is not explained how the erythema was generated; although it is mentioned that 3 different types of skin were chosen, it is not explained which type of skin it was carried out on nor how many people participated in the study. If a project is carried out on humans, it must be previously registered as a clinical trial on the corresponding pages, and the registration number must be presented in this paper. The N of all the experiments and the statistical analysis are also missing. All this information must be in the materials and methods section.

In conclusion, this paper lacks essential information that should be included before it is considered for publication.

Declarations

Potential competing interests: No potential competing interests to declare.