

Innovative application of microencapsulated polyphenols in cereal products: optimization of formulation of dairy- and gluten-free pastry

Reviewer Affiliation

Salahaddin University - Erbil, Animal Resources

Manuscript ID:

JFPE-2024-Apr-0384

Wiley - Manuscript type

Original Article

Keywords

microencapsulated phenolic compounds, acai oil, controlled allergenicity, bakery products with beta-glucan, optimization using response surface methodology

Date Submitted:

05-Apr-2024

Date Assigned:

11-Apr-2024

Date Review Returned:

27-Apr-2024

Author(s)

Półtorak, Andrzej

Wojtasik-Kalinowska, Iwona

Stelmasiak, Adrian

Szpicer, Arkadiusz

Bińkowska, Weronika

Recommendation

Accept

Would you be willing to review a revision of this manuscript?

Yes

Confidential Comments to the EIC

Reviewer comments:

The manuscript, "Innovative application of microencapsulated polyphenols in cereal products: optimization of formulation of dairy- and gluten-free pastry"

Overall, the authors have demonstrated a solid understanding of the subject matter, with a few minor areas for improvement if fixed otherwise is absolutely fine.

There are no such mistakes on the article, as its well-written and structured accordingly with solid background, details explanations of the methodology, and with great results, and discussed and compared to other findings, as well as well concluded.

The introduction is well-executed, reflecting a thorough examination of the latest scientific literature. The authors

effectively incorporate findings from recent research, showcasing a strong foundation for their work.

The methodology well-structured and covered all the necessary tests that must be conducted. From the material preparation, extraction, experimental design, physiochemical tests and sensory evaluation were well explained and used references followed.

The results, discussion, and conclusion sections are well-crafted, aligning with existing literature.

The authors successfully highlight the conclusion that could benefit from a practical application perspective that could contribute to human nutrition, food technology, or the food industry would enhance the manuscript's overall impact.

In summary, the manuscript significantly contributes to the field of study. Addressing the minor mentioned areas for improvement will undoubtedly strengthen the manuscript and its potential impact on the scientific community.

My only concerns are:

290= the section 2.6 Consumer' evaluation that should have been analyzed and have a figure or table showing the differences between the treatments and parameters and finding the most acceptable and the least acceptable samples.

I can't find a figures or table explaining that analysis.

Secondly, what the authors would recommend for further studies in term of materials used and their concentration. Are there any suggestions to add different concentration rather than content of 6.48% of polyphenol 61 microcapsules, 7.60% beta-glucan concentrate and 3.71% acai oil. Or what if they are used separately?

Any limitation they encountered?

Comments to the Author

My only concerns are:

290= the section 2.6 Consumer' evaluation that should have been analyzed and have a figure or table showing the differences between the treatments and parameters and finding the most acceptable and the least acceptable samples.

I can't find a figures or table explaining that analysis.

Secondly, what the authors would recommend for further studies in term of materials used and their concentration. Are there any suggestions to add different concentration rather than content of 6.48% of polyphenol 61 microcapsules, 7.60% beta-glucan concentrate and 3.71% acai oil. Or what if they are used separately?

Any limitation they encountered?

Files attached

[Reviewer comments.docx](#) [PDF](#) [HTML](#) - This file is for the Author and Editor

Do you want to get recognition for this review on [Web of Science](https://clarivate.com/products/scientific-and-academic-research/research-discovery-and-workflow-solutions/researcher-profiles/)?

Yes

Author's Response

Files attached