

Browser tabs: (96) WhatsApp, Rights and Acc..., Inbox (180) - n..., New tab, jaocs - Search, Journal of the..., New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtrMRxVdnXZBRrtjxWWSzn...>

Gmail search: heliyon

6 of 12

Rights and Access form Completed form for your article [HLY_e08913] inbox x

Elsevier - Author Forms -Article_Status@elsevier.com
to me

Fri, Feb 11, 2022, 10:11 AM

ELSEVIER

Dear Dr Rohmah,


Thank you for publishing your article in **Heliyon**. Dr. Raharjo completed the Rights and Access Form for your article *Bioaccessibility and antioxidant activity of β -carotene loaded nanostructured lipid carrier (NLC) from binary mixtures of palm stearin and palm olein on February 11, 2022.*

The Order Summary is attached to this email. A copy of the Order Summary is also sent to all co-authors for whom we have contact details.

Your article is free for everyone to read online at <https://doi.org/10.1016/j.heliyon.2022.e08913>

If you have any questions, please do not hesitate to contact us. To help us assist you, please quote our article reference HLY_e08913 in all correspondence.

Now that your article has been accepted, you will want to maximize the impact of your work. Elsevier facilitates and encourages authors to share their article responsibly. To learn about the many ways in which you can share your article whilst respecting copyright, visit: www.elsevier.com/sharing-articles.



81°F Berawan 8:14 05/01/2023

Browser tabs: (96) WhatsApp, Fwd: Decision on su..., Inbox (180) - miftal..., New tab, jaocs - Search, Journal of the Amer..., New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtFFxVgsRWMzrlhmQbhGH...>

Gmail search: heliyon

9 of 12

Fwd: Decision on submission HELIYON-D-21-11234 to Heliyon inbox x

Sri Raharjo <sraharjo@ugm.ac.id>
to me

Jan 1, 2022, 11:53 AM

Bu Mitakh
Berikut ini komentar/koreksi dari reviewer naskah yang disubmit ke **Heliyon**.
Tolong direspon sesuai komentarnya masing-masing reviewer.
Kalau ada yang sulit nanti bisa kita diskusikan dulu.

Terima kasih,
Sri Raharjo

----- Forwarded message -----
From: **Heliyon** <am@editorialmanager.com>
Date: Tue, Dec 28, 2021 at 3:09 AM
Subject: Decision on submission **HELIYON-D-21-11234** to **Heliyon**
To: Sri - Raharjo <sraharjo@ugm.ac.id>

Manuscript Number: **HELIYON-D-21-11234**
Title: Bioaccessibility and antioxidant activity of β -carotene loaded nanostructured lipid carrier (NLC) from binary mixtures of palm stearin and palm olein
Journal: **Heliyon**

Dear Dr. Raharjo,

We have now received all of the reviewers' comments on your recent submission to **Heliyon**.

80°F Berawan 8:12 05/01/2023

Browser tabs: (96) WhatsApp, Fwd: Decision, Inbox (180), New tab, jaocs - Search, Journal of the, New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtFFxVgsRWmzrlhmQbhGH...>

Gmail search: heliyon

9 of 12

Title: Bioaccessibility and antioxidant activity of β -carotene loaded nanostructured lipid carrier (NLC) from binary mixtures of palm stearin and palm olein
Journal: Heliyon

Dear Dr. Rahaqo,

We have now received all of the reviewers' comments on your recent submission to Heliyon.

The reviewers have advised that your manuscript should become suitable for publication in our journal after appropriate revisions.

If you are able to address the reviewers' comments, which you can find below, I would like to invite you to revise and resubmit your manuscript. We ask that you respond to each reviewer comment by either outlining how the criticism was addressed in the revised manuscript or by providing a rebuttal to the criticism. This should be carried out in a point-by-point fashion as illustrated here: <https://www.cell.com/heliyon/guide-for-authors#Revisions>

To allow the editors and reviewers to easily assess your revised manuscript, we also ask that you upload a version of your manuscript highlighting any revisions made. You may wish to use Microsoft Word's Track Changes tool or, for LaTeX files, the latexdiff Perl script (<https://ctan.org/pkg/latexdiff>).

To submit your revised manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon>, and navigate to the "Submissions Needing Revision" folder under the Author Main Menu. Your revision due date is Jan 26, 2022.

We understand that the COVID-19 pandemic may well be causing disruption for you and your colleagues. If that is the case for you and it has an impact on your ability to make revisions to address the concerns that came up in the review process, please reach out to us.

I look forward to receiving your revised manuscript.

Kind regards,
Dimitrios Lamprou
Section Editor
Heliyon

Editor and Reviewer comments

81°F Berawan 8:12 05/01/2023

Browser tabs: (96) WhatsApp, Fwd: Decision, Inbox (180), New tab, jaocs - Search, Journal of the, New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtFFxVgsRWmzrlhmQbhGH...>

Gmail search: heliyon

9 of 12

Editor and Reviewer comments:

Reviewer 1

The manuscript described the preparation and characterization of β -carotene (β C) loaded nanostructured lipid carrier (NLC). After preparation, the NLC was tested for in vitro release, bioaccessibility, and antioxidant activity. The authors demonstrated the increased release and antioxidant activity of β C. However, the NLC was not well characterized. There were other issues with the methods and results of this study. Please consider the following comments to improve the manuscript.

Introduction

1. There was no introduction and relevant information on β C. The current Introduction section was not well structured. The authors can restructure it as follows: (i) lipid-based delivery system, (ii) NLC, (iii) β C, and (iv) brief summary of the study, primary aim, and expected outcomes
2. When introducing β C, the authors should summarize previous nano drug delivery systems of β C, particularly the SLN and NLC systems. What were the limitations of those studies that led to this study?

Methods

3. Section 2.2. Preparation of β -carotene loaded Nanostructured Lipid Carriers: please clarify " β C 0.025%". The authors should include detail of the method, including (i) amount of PS, PO, β C, (ii) volume of the aqueous phase, (iii), Tween 80 concentration
4. To verify the successful production of NLC, various physicochemical tests are required, including (i) particle size and polydispersity index, zeta potential, (ii) Entrapment efficacy of β C and drug loading in the NLC, (iii) DSC, XRD, FTIR, and (iv) SEM and/or TEM. However, after preparation, the NLC in this study was not tested by these tests.
5. For in vitro release studies (sections 2.3 and 2.4): It was unclear how to separate the β C released and NLC before measuring the concentration of β C. To compare different formulations (data in figures 1 and 2), the starting amount of β C should be the same. The in vitro release in simulated gastric and intestinal fluids should be presented by a release curve, in other words, the authors should collect release samples at different timepoints (e.g., 30, 60, 90, 120 min) to show the trend of β C from NLC. If there was a burst release, it could be due to the un-entrapped β C.

Results: All the Figures should be revised as follows:

6. Figure 1: It is better to use different patterns to distinguish Intial, Mouth, Stomach, and Intestine. In the current figure, the authors used 4 different levels of black to distinguish them, however, the differences were unclear.
7. Figures 2, 4, and 5: the same issue as mentioned above.
8. Figure 3: please explain the letter a, b, c, ... in the figure.
9. In the figures, different formulations of β C were presented, including β C emulsion, β C in Tween 80 (0.01%), β C in Phosphate Buffered Saline pH 7 solution, β C (alone). The authors should describe how these formulations were prepared, what was β C (alone) (was it β C suspension in water?), and what was the concentration of β C in Phosphate Buffered Saline pH 7 solution (was it possible to prepare a solution?).

40. The authors mentioned a statistical test with 83% B and a post hoc Dunnett test with a confidence level of 95% (alpha 0.05). However, there was no result of this test in the main text and figure. Data in

Browser tabs: (96) WhatsApp, Fwd: Decision, Inbox (180), New tab, jaocs - Search, Journal of the, New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtFFxVgsRWmzrlhmQbhGH...>

Gmail search: heliyon

Compose

Inbox 13

Starred

Snoozed

Drafts

More

Labels +

9 of 12

RESULTS FOR THE FIGURES SHOULD BE REVISED AS FOLLOWS:

6. Figure 1: It is better to use different patterns to distinguish Initial, Mouth, Stomach, and Intestine. In the current figure, the authors used 4 different levels of black to distinguish them, however, the differences were unclear.
7. Figures 2, 4, and 5: the same issue as mentioned above.
8. Figure 3: please explain the letter a, b, c, ... in the figure
9. In the figures, different formulations of β C were presented, including β C emulsion, β C in Tween 80 (0.01%), β C in Phosphate Buffered Saline pH 7 solution, β C (alone). The authors should describe how these formulations were prepared, what was β C (alone) (was it β C suspension in water?), and what was the concentration of β C in Phosphate Buffered Saline pH 7 solution (was it possible to prepare a solution?)
10. The authors mentioned a statistical test with ANOVA and a post-hoc Duncan test with a confidence level of 95% (section 2.7). However, there was no result of this test in the main text and figures. Data in Figures 1-5 should be compared using the statistical test.
11. Figure 5 was not mentioned in the main text.

Interpretation:

12. Statistical results should be mentioned.

Other comments:

13. Table 1 should be moved to the supplementary material. Its information was obtained from a previous study to prepare different simulated juices. There was no new information in this table.

Reviewer 2:

The present manuscript (HELIYON-D-21-11234) titled "Bioaccessibility and antioxidant activity of β -carotene loaded nanostructured lipid carrier (NLC) from binary mixtures of palm stearin and palm olein" aimed to develop NLC of palm stearin and palm oil and evaluate its bioaccessibility and antioxidant activity. The concept behind the study was good and the results proved their claim. However, following comments should be addressed in the revised version of this manuscript.

Comment 1. First of all, the authors should explain the role of β -carotene as antioxidant in the introduction section and how NLC improves its activity?

Comment 2. Why the authors have not measured the particles size and particles size distribution, zeta potential as well as entrapment efficiency.

Comment 3. Authors should perform the stability of the developed NLC in the gastrointestinal media. Following paper can help to perform this study <https://iopscience.iop.org/article/10.1088/1361-6528/ac1098>

Comment 4. Language is poor. Authors should improve the quality of language to improve scientific value of this manuscript.

81°F Berawan 8:13 05/01/2023

Browser tabs: (96) WhatsApp, Fwd: Decision, Inbox (180), New tab, jaocs - Search, Journal of the, New tab

URL: <https://mail.google.com/mail/u/0/#search/heliyon/FMfcgzGmtFFxVgsRWmzrlhmQbhGH...>

Gmail search: heliyon

Compose

Inbox 13

Starred

Snoozed

Drafts

More

Labels +

9 of 12

Comment 2. Why the authors have not measured the particles size and particles size distribution, zeta potential as well as entrapment efficiency.

Comment 3. Authors should perform the stability of the developed NLC in the gastrointestinal media. Following paper can help to perform this study <https://iopscience.iop.org/article/10.1088/1361-6528/ac1098>

Comment 4. Language is poor. Authors should improve the quality of language to improve scientific value of this manuscript.

Data in Brief (optional)

We invite you to convert your supplementary data (or a part of it) into an additional journal publication in Data in Brief, a multi-disciplinary open access journal. Data in Brief articles are a fantastic way to describe supplementary data and associated metadata, or full raw datasets deposited in an external repository, which are otherwise unnoticed. A Data in Brief article (which will be reviewed, formatted, indexed, and given a DOI) will make your data easier to find, reproduce, and cite.

You can submit to Data in Brief when you upload your revised manuscript. To do so, complete the template and follow the co-submission instructions found here www.elsevier.com/dib-template. If your manuscript is accepted, your Data in Brief submission will automatically be transferred to Data in Brief for editorial review and publication.

Please note: an open access Article Publication Charge (APC) is payable by the author or research funder to cover the costs associated with publication in Data in Brief and ensure your data article is immediately and permanently free to access by all. For the current APC see www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal

Please contact the Data in Brief editorial office at dib-me@elsevier.com or visit the Data in Brief homepage (www.journals.elsevier.com/data-in-brief/) if you have questions or need further information.

More information and support

FAQ: How do I revise my submission in Editorial Manager?

https://service.elsevier.com/app/answers/detail/a_id/28463/supporthub/publishing/

81°F Berawan 8:13 05/01/2023