volume: 4

issue : 1

year : 2023



libyan journal of food & nutrition

An Annual Scientific Journal Issued by the Libyan Society for Food & Nutrition Tripoli - Libya





LIBYN JOURNAL OF FOOD & NUTRITION

المحلة الليبية للغذاء والتغذية



Peered Periodical Journal Issued by the Libyan Society for Food and Nutrition

4th Year, Volume (4), Issue (1).

December 2023

Editor-in-chief:

Prof. Ahmed Ashour Ahmed (University of Tripoli)

Editorial Board:

Prof. Aref Ghaith Marwan (University of Tripoli)
Dr. Ibrahim Greiby Emhemmed (University of Tripoli)
Dr. Naji Elhadi Aborus (Nalut University)

Dr. Almahdi Ahmed Sassi (University of Tripoli)

Prof. Ramadan Elsalhin Abdolgader (Omar Al-Mukhtar University)

Reviewing:

Prof. Aref Ghaith Marwan (University of Tripoli)
Dr. Ibrahim Greiby Emhemmed (University of Tripoli)

Secretary

Ms: Karima Ramadan Albagar (University of Tripoli)

Designing:

Dr. Ibrahim Greiby Emhemmed (University of Tripoli)

Correspondence:

Editor-in-chief, Libyan Journal of Food and Nutrition,
Post Office at University of Tripoli
P.O. Box. 13663
Tripoli. Libya





Copyright: © 2023

Legal Deposit Number: 385/2021, the National Library, Benghazi

ISSN:2788-7340 Online ISSN:2788-7332 Copy

All copyrights are reserved for the Libyan Journal of Food and Nutrition (LJFN), with adherence to the following points:

- It is not permissible to publish the research or any parts of it in another place, after approval of its publication in the Libyan Journal of Food and Nutrition, except after obtaining a written acknowledgment of that from the editor-inchief.
- Approval and confirmation of the researcher to transfer all copyrights to the journal, and if the journal wishes to re-publish the research, it must obtain written consent from the author of the research and it is original and not quoted.

All rights of printing and design are reserved to the designer and implementing company.



EDITORIAL FOREWORD

The Libyan Society of Food and Nutrition, affiliated with the Libyan Scientific Research Center at the Ministry of Higher Education, is pleased to announce to researchers that, by the grace of Allah, the first issue of the fourth volume 2023 of the Libyan Journal of Food and Nutrition has been published. This comes after the successful conclusion of the Second International Conference on Food and Nutrition, held in December 2023 at the College of Medical Technology, Nalut University, under the theme "Food Processing and Safety: Consumer Protection between Reality and Ambition." The issue includes some of the scientific papers presented at the conference after they were refereed and evaluated.

In order to avoid delays in publication, the Editorial Board of the journal decided to publish accepted and ready-to-publish papers electronically on the journal's website on a rolling basis. The papers will be assigned their final and approved volume numbers in this issue. Once the required number of papers for the issue is complete, it will be compiled and published electronically and in print.

The Libyan Journal of Food and Nutrition continues to shine a light on the fields of food science and nutrition, illuminating the path for researchers, professors, PhD students, master's students, and researchers in research centers and those interested in food and nutrition. We would like to emphasize that the journal will remain committed to its objectivity and distinctiveness in terms of the content published through it by following scientific standards in the evaluation and publication of research. It will also remain committed to its mission as one of the most important scientific and research journals in the fields of food science and nutrition.

The journal is one of the goals of the Society that was achieved, with the grace of Allah, with the convening of the first international conference in 2021 in Tripoli and the second international conference in 2023 in Nalut. The Society is continuing its future plans to prepare for the third international conference in 2025 at faculty of food science, Wadi Alshati University in Brak city.

The Editor-in-Chief seizes this opportunity to express his pride that the journal has not ceased publication and that he has accompanied it since the issuance of its very first issue. This effort is not attributed to the editor-in-chief alone, but is also the effort of those responsible for the journal. This effort comes in light of these circumstances in response to the keenness of our colleagues to continue giving and serving scientific research.

Finally, the Editorial Board of the journal would like to express its sincere thanks and gratitude to all who contributed to the accomplishment of this issue, especially the researchers, professors, reviewers, the scientific committee, the graphic designer of the issue, the expert professors in the advisory board, and the journal secretary who wrote, read, evaluated, and submitted the research. Their efforts have contributed to achieving the vision of the journal's goals and their unlimited support to promote it to compete with other scientific journals in the same field.

Dr. Ahmed Ashour Ahmed;

Editor-in-Chief of the journal



INSTRUCTIONS FOR AUTHORS

- 1. The number of pages of the article shall not exceed a maximum of (20) twenty pages, including the list of references, figures, tables and appendices. Except in exceptional circumstances estimated by the editorial board of the journal.
- 2. The words of the title of the article do not exceed twenty (20) words, including the main and secondary title, and are not less than five (5) words, so that the title expresses the search and is not short until it is not understood or is not long until its meaning is lost.
- 3. The number of abstract words in Arabic shall not exceed 250 words, and in English language shall not exceed 300 words as a maximum. Key words range from four to seven (4 - 7) words.
- 4. An abstract in English shall be attached to the research presented in Arabic, provided that the translation conforms to the Arabic abstract, and for the research submitted in the English language, an abstract in Arabic shall be submitted with it in conformity with the English language summary (including the title of the paper and names of the authors and their Affiliation).
- 5. The research shall be submitted written in Arabic or English and printed using Microsoft Word, with one spaces and in (Simplified Arabic) font, size 14 for Arabic searches, and in Times New Roman, with Pone spaces, and size 12 for English searches on A4 paper and send it as an electronic copy (Word file) to the E-mail of the journal.
- 6. The main title of the research **16 Bold** in the middle, the names of the authors 14 Bold and their affiliation (12) not Bold. The name of the corresponding author, along with his phone number and E-mail address should be written at the bottom of the abstract.
- 7. Main headings **14 Bold** on both sides of the paper from the right in Arabic and to the left in English. Subheadings 12 Bold on both sides of the paper, from the right in Arabic and on the left in English (nonnumbering). All text in the paper must be 14 normal in Arabic and 12 normal in English with the same font type showed previously, with 1 space between the lines.
- 8. Only the method of (Harvard) or (American Psychological Association) APA of References style is used in writing references or referring to them within the research. Provided that the number of references shall not be less than 5 and not more than 30 references, except in special cases determined by the editorial board of the journal.
- 9. Taking into consideration how and the importance of using punctuation marks when writing, such as:
 - a. The dot (.), the semicolon (;), the hyphen (:), the exclamation point (!), the question mark (?), the dash (-) b. Quotation marks (" "), regular parentheses (), square
 - brackets [], and removed text (....) and the join sign (-).
- 10. Figures and tables are placed in the body of the research directly after referring to it in the text, and so on. Tables are arranged and placed appropriately with text centered inside table cells (with no shadow at any raw or column and text size not less than 10 or more than 12 (especially



tables that need to change the **page position to landscape**) and the title is written above the table so that the journal editorial board can properly output the journal. And control of distances (especially the prescribed page margins). Figures are preferred to be drawn using the Excel software to be labeled (at the **bottom of each figure** and not inside it) and numbered with text font size as shown in tables.

- 11. Conclusions: The number of its words does not exceed 100 words in one paragraph.
- 12. Thanks and gratitude (optional): Thanks are given to everyone who has supported in research or writing in terms of financial support, printing, and non-essential suggestions. The number of its words does not exceed 50 words.
- 13. Any attachments could be added: such as data or terms related to the article. But it does not change the meaning and value of the article. But the author sees it as a useful addition to the reader.
- 14. The Corresponded Author Must Take on That:
 - The article has not been previously published and will not be re-published after being accepted for publication in LJFN. The article or any part of it may be published with the permission of the Editor-in-Chief.
 - The article does not violate the rights of others.
 - Everyone mentioned his name as the author of the article has participated in an effort according to the scientific foundations of rights.
 - When the research is accepted for publication, the researcher (s) signs the transfer of all property rights related to the research to the Libyan Society for Food and Nutrition.

Editorial Board



CONTENTS

No.	TITLE	Page
1	Impact of Frying Process on Physicochemical Indices of Edible Vegetable Oils in Libya with Varying Omega Fatty Acid Content Salem Abdrba Mahmoud	1
2	Natural occurrence of emerging Fusarium mycotoxins in malting barley Safieddin Inbaiaa, Arifa Farooqib and Rumiana.V. Rayb.	12



CONTENTS

Arabic Abstracts

الصفحة	العنوان	ر.م.
	تأثير عملية القلي على المؤشرات الفيزيائية والكيميائية للزيوت النباتية	
11	الصالحة للأكل في ليبيا مع تباين محتوى الأحماض الدهنية أوميجا	1
	سالم عبد ربه محمود	
31	الحدوث الطبيعي لسموم الفيوزاريوم الناشئة في حبوب الشعير	2
	صفي الدين انبيه، عريفه فاروق، روميانا راي	



المجلة الليبية للغذاء والتغذية LIBYN JOURNAL OF FOOD & NUTRITION



الجهات الراعية والداعمة للمجلة الليبية للغذاء والتغذية





