ISSN: 2157-944X Volume 14, Number 5, May 2023



Food and Nutrition Sciences



https://www.scirp.org/journal/fns

Journal Editorial Board

ISSN Print: 2157-944X ISSN Online: 2157-9458 https://www.scirp.org/journal/fns

Editor-in-Chief

Prof. Alessandra Bordoni

University of Bologna, Italy

Associate Editors-in-Chief

Prof. Xufeng Huang Prof. Michael G. Kontominas

University of Wollongong, Australia University of Ioannina, Greece

Editorial Board

Prof. Hülva Cicek Dr. Ammar Mohammed Hamood AL-Farga Dr. Kayanush J. Aryana Dr. Lauri O. Byerley Dr. Daniel Cozzolino Dr. Amira Muhammad Galal Darwish Prof. Kelvin J. A. Davies Dr. Amith R. Devireddy Prof. Asim K. Duttaroy Prof. Yousif Abd El-Aziz Abdou Elhassaneen **Dr. Anthony Fardet** Prof. Tomas Girbes Dr. Beau K. Greer Dr. Jeffrey S. Hampl **Prof. Yong He** Dr. Kimberly B. Heidal **Prof. Yu Huang** Dr. Jose C. Jimenez-Lopez Dr. Jagat R. Kanwar Dr. Dalia El Khoury Prof. Patricia A. Kruk Dr. Jean-Claude Lavoie Dr. Francisco Sánchez Montero **Dr. Francisco Javier Moreno** Prof. Hasan Mukhtar Dr. Maurice O'Sullivan Dr. Mustafa Zafer Ozel Dr. Uma Devi Palanisamy Prof. Young W. Park Dr. Salina Parveen Dr. Reza Poureslami Dr. Jayadev Raju **Prof. Sherif Sabry** Prof. Charles R. Santerre Dr. Heidi J. Silver Prof. Jesus Simal-Gandara Prof. Linda G. Snetselaar Dr. Lucy Thairu Dr. Brijesh Kumar Tiwari Prof. Alan C. Tsai Prof. Edwin Edward Kadima Wamukoya Dr. Thomas T. Y. Wang Dr. Jack Wing Tak Wong Prof. Baojun Xu

Gaziantep University, Türkiye University of Jeddah, Saudi Arabia Louisiana State University, USA Louisiana State University, USA The University of Adelaide, Australia City of Scientific Research and Technological Applications (SRTA City), Egypt University of Southern California, USA University of Missouri, USA University of Oslo, Norway Minoufiya University, Egypt Institute National de la Recherche Agronomique (INRA), France University of Valladolid, Spain Sacred Heart University, USA Arizona State University, USA Zhejiang University, China East Carolina University, USA Chinese University of Hong Kong, China Spanish National Research Council (CSIC), Spain Deakin University, Australia University of Guelph, Canada University of South Florida, USA University of Montreal, Canada College of Nutrition Professionals of Costa Rica, Costa Rica Autonomous University of Madrid, Spain University of Wisconsin, USA University College Cork, Ireland The University of York, UK Monash University, Sunway Campus, Australia Fort Valley State University, USA University of Maryland Eastern Shore, USA Insta-Pro International, USA Health Canada, Canada Menoufia University, Egypt Purdue University, USA Vanderbilt University, USA University of Vigo, Spain The University of Iowa, USA Touro University, USA Manchester Metropolitan University, UK Asia University, Chinese Taipei Masinde Muliro University of Science and Technology, Kenya Johns Hopkins University, USA Stanford University, USA Beijing Normal University-Hong Kong Baptist University United International College, China



Table of Contents

Volume 14 Numbe	r 5	May 2023
Uniqueness of Tryptophan in the Transport System in the Brain and Peripheral Tissues M. Ogawa, F. Shimizu, Y. Ishii, T. Takao, A. Takada401		
Chemical Composition of <i>Sphyraena barracuda</i> with Different Area, Size and Season, in Sudanese Red Sea Coast		
H. G. A. Ahmadoon, A. N. Elav	vad, A. M. Alamin, A. A. Babiker	415
Primary Characterization of a Novel Soymilk-Cashew Fermented with an Improving of Its Antioxidant and Anti-Inflammatory Contents		
A. A. Antoine, A. Koua, O. H.	Djeneba, G. T. R. D'Avila	
Measurement of the Effects of Nutritional Education for Reducing Sodium Intakes and Increasing Potassium Intakes		
T. S. Kénao, J. C. Sossa, M. N. I	Paraiso, S. Alidou, G. Sopoh, T. Tchamdja, D. E. Landoh	, M. Bélo, T. A. Bakaï436
The Beneficial Effect of 12-Hour Fasting, 45 Minutes Exercise Thrice Weekly and Their Combination on Weight Loss, Anthropometric Measures and Metabolic Syndrome		
K. El-Reshaid, S. Al-Bader, S. C	Ghanem	451
Performance of Crude Coagulants from Adult Rabbit Stomach and Their Influence on the Brazilian Prato Cheese Type Composition		
M. S. E. Jiménez, N. S. P. S. Ric	hards	462
Chronic Supplementation with L-Isoleucine Alone or in Combination with Exercise Reduces Hepatic Cholesterol Levels with No Effect on Serum Glucose, Insulin, or Lipids in Rats Fed a High Fructose Diet		
M. Dellogono, L. Clark, C. Ferr	rara, M. Garelnabi, T. A. Wilson	

Food and Nutrition Sciences (FNS) Journal Information

SUBSCRIPTIONS

The *Food and Nutrition Sciences* (Online at Scientific Research Publishing, <u>https://www.scirp.org/</u>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates: Print: \$89 per copy. To subscribe, please contact Journals Subscriptions Department, E-mail: <u>sub@scirp.org</u>

SERVICES

Advertisements Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA. E-mail: <u>sub@scirp.org</u>

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2023 by Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY). <u>http://creativecommons.org/licenses/by/4.0/</u>

Copyright for individual papers of the journal:

Copyright © 2023 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact: E-mail: <u>fns@scirp.org</u>



Selectific





Food and Nutrition Sciences

ISSN Print: 2157-944X ISSN Online: 2157-9458 https://www.scirp.org/journal/fns

Food and Nutrition Sciences (FNS) is an international journal dedicated to the latest advancements in related areas. The goal of this journal is to keep a record of the state-of-the-art research and to promote study, research and improvement within its various specialties.

Subject Coverage

All manuscripts submitted to FNS must be previously unpublished and may not be considered for publication elsewhere at any time during FNS's review period. Additionally, accepted ones will immediately appear online followed by printed in hard copy. Topics to be covered by this journal include, but are not limited to:

- Animal Nutrition
- Antioxidants and Phytochemicals in Food
- Byproducts Processing and Utilization
- Calorie Intake and Consumption
- Carbohydrates and Fibers
- Clinical Nutrition
- Consumer Choice, Preferences, and Concerns
- Diets and Diseases
- Eating Disorders
- Food Chemistry, Engineering and Microbiology
- Food Conservation and Preparation
- Food Machinery
- Food Packaging
- Food Processing Technology
- Food Safety and Hygiene
- Food Science and Technology

- Grain and Oil Engineering
- Healthy Eating Initiatives
- Hormonal Regulations
- Malnutrition
- Maternal and Infant Nutrition
- Metabolism and Nutrition Physiology
- Molecular Gastronomy
- Nutrient Metabolism
- Nutrition and Immunology
- Obesity
- Proteins and Amino Acids
- Public Health Nutrition
- Sensory Analysis
- Sports Nutrition
- Vitamins and Minerals

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of FNS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

https://www.scirp.org/journal/fns

E-mail: fns@scirp.org

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

What is Open Access?

Art and Design Review

Advances in

dvances in Biological bemistry Entomolog

Applied Mathematics

Engineering

uitit e

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

• High visibility for maximum global exposure with open access publishing model

Soft

- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



Website: https://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org