### free radical biology & medicine impact factor

free radical biology & medicine impact factor is a critical metric that reflects the journal's influence and reputation within the scientific community, particularly in the fields of biochemistry, molecular biology, and medical research. This article explores the significance of the Free Radical Biology & Medicine impact factor, highlighting its role in academic publishing and research evaluation. Understanding this impact factor helps researchers, authors, and institutions gauge the journal's standing and make informed decisions about manuscript submissions. Additionally, the article discusses the factors that affect the impact factor, its calculation methodology, and how it compares to other journals in the field. Finally, practical insights into how the impact factor influences scientific careers and research dissemination are provided. The discussion aims to provide a comprehensive overview of why the free radical biology & medicine impact factor matters and how it shapes the landscape of free radical and oxidative stress research.

- Understanding the Free Radical Biology & Medicine Impact Factor
- Calculation and Significance of the Impact Factor
- Factors Influencing the Free Radical Biology & Medicine Impact Factor
- Comparison with Other Journals in the Field
- Implications of the Impact Factor for Researchers and Institutions

Understanding the Free Radical Biology & Medicine Impact

### **Factor**

The free radical biology & medicine impact factor is a bibliometric indicator that measures the average number of citations received per paper published in the journal during a specific period, usually over two years. It reflects the journal's prominence in disseminating influential research on free radicals, oxidative stress, and related biomedical topics. Impact factors are widely used to assess journal quality and visibility within the scientific community.

Free Radical Biology & Medicine is a leading journal dedicated to studies on reactive oxygen species, antioxidants, and molecular mechanisms of oxidative damage and protection. The impact factor serves as a benchmark to evaluate the journal's reach and the importance of its published articles to researchers, clinicians, and educators in the biomedical sciences.

### Role in Academic Publishing

In academic publishing, the free radical biology & medicine impact factor is a crucial criterion for authors when selecting a journal for manuscript submission. A higher impact factor often signifies a rigorous peer-review process and greater dissemination potential. Consequently, the journal attracts high-quality research papers that advance the understanding of oxidative stress and its implications in health and disease.

### Calculation and Significance of the Impact Factor

The impact factor is calculated annually by dividing the number of citations in the current year to articles published in the previous two years by the total number of citable articles published in those two years. For example, the 2023 impact factor would be based on citations in 2023 to articles published in 2021 and 2022.

This metric is particularly significant for free radical biology & medicine because it quantifies how often its articles are referenced in subsequent research, indicating the journal's influence on ongoing scientific developments. A higher impact factor generally correlates with greater academic prestige and can affect funding decisions, hiring, and promotions in research institutions.

#### **Understanding Citable Items**

Citable items typically include original research articles, reviews, and proceedings papers. Editorials, letters, and news items are generally excluded from the denominator in the impact factor calculation. The quality and quantity of these citable items directly influence the impact factor of free radical biology & medicine.

# Factors Influencing the Free Radical Biology & Medicine Impact Factor

Several factors contribute to the fluctuation and level of the free radical biology & medicine impact factor. These include the journal's editorial policies, the relevance of published topics, citation practices in the field, and the timeliness of publication. Additionally, the scientific community's interest in free radical research and emerging trends in oxidative stress studies affect citation rates.

### **Editorial Practices and Publication Quality**

The rigorous peer-review process and selection of high-impact research articles increase the likelihood of citations. Free Radical Biology & Medicine maintains high standards, thereby attracting influential studies that contribute to a higher impact factor.

#### Research Trends and Scientific Interest

The evolving landscape of free radical and oxidative stress research, including new discoveries in disease mechanisms and therapeutic approaches, impacts how frequently articles are cited. Journals that publish pioneering or comprehensive review articles tend to have a higher citation rate, positively affecting the impact factor.

### Comparison with Other Journals in the Field

Evaluating the free radical biology & medicine impact factor alongside other journals in related disciplines provides context for its standing. Journals focusing on oxidative stress, redox biology, and related biomedical sciences vary in their citation metrics depending on their scope, audience, and publication frequency.

### Peer Journals in Oxidative Stress and Redox Biology

Some prominent journals with overlapping subject matter include Redox Biology, Antioxidants & Redox Signaling, and Free Radical Research. While each journal has unique editorial policies and focuses, comparing their impact factors offers insight into the competitive landscape and research influence.

### Impact Factor as a Comparative Metric

While the impact factor is widely used for comparison, it should be considered alongside other metrics such as the h-index, Eigenfactor, and article-level metrics to form a comprehensive view of journal impact. Free Radical Biology & Medicine consistently ranks among the top journals in its field, reflecting its authoritative role in publishing cutting-edge research.

# Implications of the Impact Factor for Researchers and Institutions

The free radical biology & medicine impact factor influences multiple aspects of the scientific ecosystem, including researcher visibility, funding opportunities, and institutional reputation. Publishing in high-impact journals can enhance a researcher's profile and facilitate career advancement.

#### **Benefits for Authors**

- · Increased visibility and recognition within the scientific community
- · Greater likelihood of citations and academic influence
- Improved chances of securing research funding and collaborations
- Enhanced prospects for career progression and tenure consideration

#### **Institutional and Funding Considerations**

Academic institutions often use journal impact factors, including that of free radical biology & medicine, as benchmarks for evaluating research output quality. Funding agencies may also consider the impact factor of publication venues when assessing grant applications, making it a significant factor in the research funding landscape.

### Frequently Asked Questions

What is the current impact factor of the journal Free Radical Biology & Medicine?

As of the most recent Journal Citation Reports, the impact factor of Free Radical Biology & Medicine is approximately 7.6.

## How has the impact factor of Free Radical Biology & Medicine changed over the past five years?

The impact factor of Free Radical Biology & Medicine has shown a steady increase over the past five years, reflecting its growing influence in the field of oxidative stress and free radical research.

## Why is the impact factor important for Free Radical Biology & Medicine?

The impact factor is important because it measures the average number of citations to recent articles published in the journal, indicating its relevance and prestige in the scientific community.

## Where can I find the official impact factor for Free Radical Biology & Medicine?

The official impact factor can be found in the Journal Citation Reports published by Clarivate Analytics or on the journal's official website.

## Does Free Radical Biology & Medicine have a higher impact factor compared to other journals in the same field?

Yes, Free Radical Biology & Medicine generally ranks among the top journals in the field of oxidative stress and free radical research, with a higher impact factor compared to many related journals.

## How does the impact factor of Free Radical Biology & Medicine influence researchers' decisions to publish there?

A higher impact factor often attracts researchers because it indicates greater visibility and potential impact of their work within the scientific community.

## Are there other metrics besides impact factor to evaluate Free Radical Biology & Medicine?

Yes, other metrics include the h-index, CiteScore, Eigenfactor, and article-level metrics which provide a broader view of the journal's influence.

## How frequently is the impact factor of Free Radical Biology & Medicine updated?

The impact factor is updated annually, typically released each year around June or July by Clarivate Analytics.

## Can the impact factor of Free Radical Biology & Medicine predict the quality of individual articles?

While a high impact factor suggests the journal publishes influential research, it does not guarantee the quality of individual articles, which should be evaluated on their own merits.

### **Additional Resources**

1. Free Radical Biology and Medicine: Principles and Perspectives

This book provides a comprehensive overview of the fundamental concepts in free radical biology, including the chemistry of reactive oxygen species and their role in cellular processes. It discusses the impact of oxidative stress on human health and disease, offering insights into therapeutic approaches. The text is ideal for researchers and students seeking an in-depth understanding of free radical mechanisms.

2. Oxidative Stress and Free Radical Damage in Human Disease

Focusing on the pathological implications of free radicals, this book explores how oxidative stress contributes to various diseases such as cancer, neurodegenerative disorders, and cardiovascular

conditions. It reviews current scientific findings and discusses potential antioxidant therapies. The book is valuable for clinicians and biomedical researchers interested in translational medicine.

#### 3. Free Radicals in Biology and Medicine: Impact and Innovations

This title highlights the latest advances in free radical research and their biomedical applications. It covers state-of-the-art methodologies for detecting and measuring free radicals and evaluates the impact factor of related scientific journals. The book is a useful resource for scientists looking to stay updated on cutting-edge developments in the field.

- 4. Antioxidants and Free Radical Scavengers: Therapeutic Potential and Clinical Applications

  Exploring the role of antioxidants in neutralizing free radicals, this book delves into therapeutic strategies aimed at mitigating oxidative damage. It includes discussions on natural and synthetic antioxidants, their mechanisms of action, and clinical trial outcomes. The comprehensive coverage makes it suitable for pharmacologists and healthcare professionals.
- 5. Redox Biology and Medicine: Emerging Concepts and Clinical Relevance

  This book examines the broader context of redox biology, emphasizing the interplay between free radicals and cellular signaling pathways. It discusses the clinical relevance of redox imbalances and their impact on disease progression. Researchers and clinicians will find valuable insights into
- 6. Free Radical Research: Methodologies and Impact Assessment

diagnostic and treatment modalities based on redox principles.

A methodological guide, this book presents various experimental techniques used in free radical research, including electron spin resonance and fluorescence assays. It also addresses the evaluation of scientific impact factors for journals specializing in free radical biology. Ideal for laboratory scientists and research students, it aids in designing robust experiments.

#### 7. Clinical Implications of Free Radical Biology: From Bench to Bedside

Bridging basic science and clinical practice, this book reviews how discoveries in free radical biology translate into medical interventions. It covers diagnostic biomarkers, treatment options, and patient management strategies related to oxidative stress. The text is tailored for medical practitioners and

translational researchers.

8. Free Radicals and Aging: Molecular Mechanisms and Therapeutic Perspectives

This title explores the connection between free radicals and the aging process at the molecular level. It discusses how oxidative damage accumulates over time and contributes to age-related diseases.

Potential therapies aimed at modulating free radical activity to promote healthy aging are also reviewed.

9. Impact Factor Analysis of Journals in Free Radical Biology and Medicine

Dedicated to the bibliometric evaluation of journals in the field, this book analyzes impact factors and citation metrics to assess research influence. It offers guidance on selecting high-impact journals for publication and understanding trends in free radical biology research. Researchers and academic librarians will find this resource particularly helpful.

### Free Radical Biology Medicine Impact Factor

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free radical biology medicine impact factor: Free Radical Biology of & Endocrine, Metabolic Immune Disorders Asis Bala, 2022-04-20 This reference explores the science of signaling mechanisms associated with diseases like endocrine, metabolic and immune disorders which are linked to oxidative stress mediated disease mechanisms. The common diseases in these categories include diabetes mellitus and arthritis and conditions defined by inflammation and autoimmunity. These diseases involve metabolic pathways mediated by reactive oxygen species or free radicals. The pathways are targets in the mechanism of drugs which aim to treat related disorders. The book covers key topics in free radical biology that help to understand the nature of the pathways and the pharmacology of the drugs that are designed to target them.5 chapters elucidate the free radical biology of the diseases.1. Role of free radical biology in diabetes mellitus2. Role of GSK3 in regulation of insulin release and glucose metabolism3. Regulatory role of NRF2 in rheumatoid arthritis4. Role of free radical biology in Alzheimer's disease5. Regulatory role of immune cells mediated antibody on rheumatoid arthritis Key features:- Elucidates the key biochemical and pharmacological mechanisms that are mediated by free radicals in common endocrine, metabolic and immune diseases- Explains the activation of immunological factors (like RF and ACPA) that trigger inflammation and arthritis- Covers the role of free radicals in Alzheimer's disease and new interventions that target mitochondrial mechanisms- Systematically explains the molecular biology

of free radicals with the help of schematic diagrams - Includes references for further reading The accessible and structured text in this reference make it a suitable resource for all biomedical scientists, faculty and postgraduate students in academia and industry.

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and clinicians who would be interested in novel findings that may link various aspects of the disease.

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free radical biology medicine impact factor: Fight Heart Disease with Vitamins and Antioxidants Kedar N. Prasad, 2014-11-20 The most complete and up-to-date resource on the powerful benefits of micronutrients for heart disease prevention and treatment • Provides an easy-to-follow program of nutritional supplements to halt the progression of heart disease and prevent its onset despite family history • Shows how merely changing your diet and activity level cannot fully counteract the chronic inflammation and free radical damage at the source of heart disease • Debunks flawed conclusions of the medical community that show vitamins and antioxidants to be ineffective for treatment of heart disease and high blood pressure In this practical scientific guide, leading researcher in cancer, heart disease, and diabetes prevention Kedar N. Prasad, Ph.D., reveals the latest revolutionary discoveries on the use of antioxidants and micronutrients to treat heart disease. He details how the proper combinations of vitamin and antioxidant supplements can greatly increase the effectiveness of standard medical treatments for heart disease as well as help balance cholesterol levels and blood pressure, minimize plaque and clot formation, reduce angina and atherosclerosis, and prevent onset of heart disease despite family history. Prasad shows how chronic inflammation, oxidative stress, homocysteine levels, and free radical damage are the chief culprits in the progression of heart disease and that merely changing your diet and activity level and regulating cholesterol and blood pressure cannot fully counteract an unhealthy internal state. He provides an easy-to-follow daily supplement regime for multiple age groups to target free radical damage and cell injury and stop the progression of heart disease and its related complications. Sharing the scientific data on familial heart disease and antioxidant use, he debunks the flawed conclusions of the medical community that vitamins and antioxidants are ineffective for heart disease, revealing how their studies focused on specific micronutrients rather than synergistic combinations. Offering the missing complement to the standard care of medications, diet, exercise, and lifestyle changes promoted by mainstream medicine, this guide provides a powerful approach to heart disease prevention, treatment, and care.

free radical biology medicine impact factor: Cardiovascular Disease British Nutrition Foundation, 2008-04-15 This important and timely book comprises the comprehensive and authoritative independent report of the British NutritionFoundation Task Force on the link between emerging aspects of dietand cardiovascular disease, a major cause of early death and disability. Written by leading experts in the area, Cardiovascular Disease:Diet, Nutrition and Emerging Risk Factors looks further than thewell recognised factors such as high blood cholesterol and smokingto identify and explore more subtle markers of risk. Chapters include coverage of novel lipid factors, vascularfunction, clotting factors, inflammatory factors, oxidative stressand homocysteine and early origins of adult disease. The impact of obesity, insulin resistance, genetic predisposition and factors related to adipose tissue are also addressed. Of vital use to awide range of health professionals this cutting-edge book provides the reader with: \* core information for health

professionals as well as thoseinvolved in food formulation in the food industry \* a dedicated question and answer chapter \* important conclusions and recommendations with 'take-homemessages' Dietitians, nutritionists, general and family practitioners, cardiologists, cardiovascular specialists, community nurses, personnel in the food industry involved in product formulation, production, labelling of packaging and marketing will find this avaluable reference. Lecturers, undergraduates and postgraduates innutrition, dietetics, food science and medicine; libraries in allresearch establishments, commercial organisations, medical schoolsand universities where these subjects are studied or taught willalso find this an important addition to their shelves.

free radical biology medicine impact factor: Imino Acids—Advances in Research and Application: 2013 Edition , 2013-06-21 Imino Acids—Advances in Research and Application: 2013 Edition is a ScholarlyBrief™ that delivers timely, authoritative, comprehensive, and specialized information about ZZZAdditional Research in a concise format. The editors have built Imino Acids—Advances in Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about ZZZAdditional Research in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Imino Acids—Advances in Research and Application: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

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free radical biology medicine impact factor: <u>Cardiovascular Diseases</u> Nilanjana Maulik, Ph.D., 2013-04-09 With cardiovascular disease remaining one of the primary causes of morbidity and mortality worldwide, there is a great need to further understand the molecular basis of this disease class and develop new therapeutic or preventative measures. Cardiovascular Diseases: Nutritional and Therapeutic Interventions presents up-to-date information on the pathobiology of cardiovascular diseases, emphasizing emerging therapeutics and nutritional interventions. The book is divided into four parts: epidemiology, epigenetics, pathobiology, and therapies for cardiovascular diseases. Part I details epidemiological studies, highlighting the extent of the clinical problem. Part II describes the genetic and, primarily, epigenetic modifications associated with cardiovascular disease, including

the importance of DNA methylation status and the possibility of early intervention using simple dietary modifications. The text also discusses histone modifications associated with disease and potential therapeutic synthetic and dietary compounds such as resveratrol and garlic. Covering the etiology and pathobiology, part III discusses lipid regulation, micro-RNAs, emerging cell-based therapies, and new receptor targets for therapeutics as well as targeted imaging. It also describes the link between cancer therapies and cardiomyopathy and the potential of vitamin C to ameliorate this effect. Part IV focuses on therapeutic and nutritional interventions, namely, stem cell therapies, emerging nanomedicines, and a wide range of dietary interventions. These include general healthy diets, fruits and vegetables, botanicals, effects of specific compounds such as antioxidants, and discussions on garlic, curcumin, and resveratrol. The text also covers lifestyle factors, emphasizing the importance of stress in the occurrence of and meditation and yoga in the management of cardiovascular disease. This book provides a comprehensive reference for clinicians and scientists, combining epidemiology, prevention, and modern treatment strategies.

free radical biology medicine impact factor: Encyclopedia of Reproduction , 2018-06-29 Encyclopedia of Reproduction, Second Edition, Six Volume Set comprehensively reviews biology and abnormalities, also covering the most common diseases in humans, such as prostate and breast cancer, as well as normal developmental biology, including embryogenesis, gestation, birth and puberty. Each article provides a comprehensive overview of the selected topic to inform a broad spectrum of readers, from advanced undergraduate students, to research professionals. Chapters also explore the latest advances in cloning, stem cells, endocrinology, clinical reproductive medicine and genomics. As reproductive health is a fundamental component of an individual's overall health status and a central determinant of quality of life, this book provides the most extensive and authoritative reference within the field. Provides a one-stop shop for information on reproduction that is not available elsewhere Includes extensive coverage of the full range of topics, from basic, to clinical considerations, including evolutionary advances in molecular, cellular, developmental and clinical sciences Includes multimedia and interactive teaching tools, such as downloadable PowerPoint slides, video content and interactive elements, such as the Virtual Microscope

free radical biology medicine impact factor: Molecular Nutrition and Mitochondria Sergej M. Ostojic, 2022-10-20 Molecular Nutrition and Mitochondria: Metabolic Deficits, Whole-Diet Interventions, and Targeted Nutraceuticals provides a comprehensive examination of molecular aspects of mitochondrial nutrition and how dietary compounds might impact the treatment of mitochondrial dysfunction. Beginning with an overview of the fundamentals of mitochondria physiology and the methods used to evaluate mitochondrial imbalance in clinical practice, the book goes on to outline nutritional shortfalls in mitochondrial dysfunction and highlights the complex intra-organelle milieu affecting interactions between food compounds and mitochondrial co-factors, metabolites, and signaling molecules. Further sections explore the impact of essential nutrients, such as vitamin E, fatty acids, and complex lipids, on mitochondrial biogenesis, as well as non-essential bioactive compounds originating from food that can be evaluated for their mitochondria-modulating potential, such as mitochondria-targeted small molecule antioxidants, plant-based pigments and organic compounds, nucleotides, non-proteogenic amino acids and derivatives, and mitochondria-specific enzyme mimetics from food. Molecular Nutrition and Mitochondria covers the key impacts of nutrition on mitochondria, and is the ideal reference for researchers, students and clinicians looking to develop an in-depth understanding of how dietary compounds can prevent and treat disorders associated with mitochondrial dysfunction. - Describes the fundamentals of mitochondria physiology and considers the methods used to evaluate mitochondrial imbalance in clinical practice - Provides broad biochemical and metabolic background on nutritional deficits found in mitochondrial dysfunction - Explores the prevention and treatment of various inherited and acquired disorders associated with mitochondrial dysfunction - Discusses the link between the dosage for each nutrient (nutritional vs. pharmacological) and the clinical effect -Features a dedicated section on whole-diet interventions and mitochondrial function

free radical biology medicine impact factor: Selenium in ruminant nutrition and health

Peter Surai, 2024-05-21 Selenium (Se) is an essential dietary trace element participating in the regulation of various physiological functions in humans and farm animals through its incorporation into a range of selenoproteins. Low Se content in main feed ingredients is a common problem worldwide and dietary Se supplementation is a current practice in ruminant nutrition. Recent research clearly proved that sodium selenite, used for the last 50 years as a feed supplement, is not an optimal form of Se. However, use of organic selenium in dairy and beef diets can help meet Se requirement and maintain health/high immunocompetence, productive and reproductive performance. The goal of this book is to provide up-to-date information about the roles of Se in ruminant nutrition and health. A special emphasis is given to the role of selenium as an essential part of the integrated antioxidant system. The concept of using organic Se in ruminant nutrition is described in detail with emphasis on selenomethionine as a storage form of Se in the body. Also, specific Se deficiency-related disorders in ruminants are described and the importance of Se in growth, development, immunity and reproduction is demonstrated. Molecular mechanisms of protective effects of Se under stressful conditions of commercial milk and meat production are characterized. This book will be of practical importance to dairy and beef producers, to nutritionists and vets as well as for animal scientists, students of agricultural colleges and universities. It will also be of interest for researchers in areas related to environmental sciences, food sciences, physiology, etc.

free radical biology medicine impact factor: Reactive Oxygen, Nitrogen and Sulfur Species in Plants Mirza Hasanuzzaman, Vasileios Fotopoulos, Kamrun Nahar, Masayuki Fujita, 2019-07-02 Presents a multidisciplinary analysis of the integration among reactive oxygen species (ROS), reactive nitrogen species (RNS), and reactive sulfur species (RSS). Since plants are the main source of our food, the improvement of their productivity is the most important task for plant biologists. In this book, leading experts accumulate the recent development in the research on oxidative stress and approaches to enhance antioxidant defense system in crop plants. They discuss both the plant responses to oxidative stress and mechanisms of abiotic stress tolerance, and cover all of the recent approaches towards understanding oxidative stress in plants, providing comprehensive information about the topics. It also discusses how reactive nitrogen species and reactive sulfur species regulate plant physiology and plant tolerance to environmental stresses. Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms covers everything readers need to know in four comprehensive sections. It starts by looking at reactive oxygen species metabolism and antioxidant defense. Next, it covers reactive nitrogen species metabolism and signaling before going on to reactive sulfur species metabolism and signaling. The book finishes with a section that looks at crosstalk among reactive oxygen, nitrogen, and sulfur species based on current research done by experts. Presents the newest method for understanding oxidative stress in plants. Covers both the plant responses to oxidative stress and mechanisms of abiotic stress tolerance Details the integration among reactive oxygen species (ROS), reactive nitrogen species (RNS) and reactive sulfur species (RSS) Written by 140 experts in the field of plant stress physiology, crop improvement, and genetic engineering Providing a comprehensive collection of up-to-date knowledge spanning from biosynthesis and metabolism to signaling pathways implicated in the involvement of RONSS to plant defense mechanisms, Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms is an excellent book for plant breeders, molecular biologists, and plant physiologists, as well as a guide for students in the field of Plant Science.

free radical biology medicine impact factor: The Encyclopedia of Vitamin E Victor R. Preedy, Ronald Ross Watson, 2007 Vitamin E is an important dietary constituent which helps in the defence against cellular damage. The process of its absorption from food and its utilization by the body is an intricate series of reactions. It is also used therapeutically in treating numerous diseases and conditions such as skin damage and the prevention of pathological lesions in major organs, and has been shown to be an important factor in preventing heart disease and cancer. Over 100 chapters from international contributors make this book the most comprehensive reference work in

describing both the positive and negative effects and actions of Vitamin E. Chapters are divided into subsections which cover: nomenclature, biochemical, physical and chemical aspects of vitamn E related compounds; dietary and nutritional influences and effects; cocktails, anti-oxidants mixtures and novel analogues; general physiological systems, metabolism and metabolic stress; brain, neurological and optical systems; reproductive systems, fetus and infant; musculo-skeletal systems and exercise; cardiovascular and pulmonary systems; skin; hepatic, nephrotic and gastrointestinal systems; immune and haematological systems and cancer.

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Frod-relevant Polyphenols Jose Cuevas Valenzuela, Jose Rodrigo Vergara-Salinas, Jose Ricardo Perez-Correa, 2016-09-19 The growing concern for human wellbeing has generated an increase in the demand for polyphenols, secondary plant metabolites that exhibit different bioactive properties. This increasing demand is mainly due to the current applications in the food industry where polyphenols are considered essential for human health and nutrition. Advances in Technologies for Producing Food-relevant Polyphenols provides researchers, scientists, engineers, and professionals involved in the food industry with the latest methodologies and equipment useful to extract, isolate, purify, and analyze polyphenols from different available sources, such as herbs, flora, vegetables, fruits, and agro-industrial wastes. Technologies currently used to add polyphenols to diverse food matrices are also included. This book serves a reference to design and scale-up processes to obtain polyphenols from different plant sources and to produce polyphenol-rich foods with bioactive properties (e.g. antioxidant, antibacterial, antiviral, anticancer properties) of interest for human health and wellbeing.

free radical biology medicine impact factor: Lifestyle and Environmental Influences on Alzheimer's Disease: Exploring the Roles of Diet, Exercise, Cognitive Reserve, Sleep, and Air Quality Guohao Wang, Pei Shang, Song Qiao, Hongquan Wang, Yan Liu, Zhengjun Wang, 2025-09-12 Background: The prevalence of Alzheimer's disease (AD) is steadily increasing, necessitating a profound understanding of its etiology for effective prevention and management strategies. This Research Topic aims to investigate lifestyle and environmental factors contributing to AD development and progression, several aspects have been identified as potential influencers, such as diet, exercise, cognitive reserve, sleep patterns, and air quality. Examining these elements and the molecular mechanism of these factors provides valuable insights into the intricate interactions shaping the risk of developing AD. Goal: The primary objective of this Research Topic is to enhance our understanding of how diverse lifestyle and environmental factors influence AD onset and progression. By exploring the relationships between diet, exercise, cognitive reserve, sleep patterns, air quality, and AD, we aim to uncover potential preventive measures and therapeutic interventions. This research seeks to offer evidence-based strategies for reducing AD risk, improving the quality of life for affected individuals, and potentially introducing novel therapeutic approaches.

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