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# Food & Function

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## IN THIS ISSUE

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**Cover**
See Xiaofeng Li, Guanglei Zhao *et al.*, pp. 9734–9749.

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**Inside cover**
See Ziren Su, Jianhui Xie *et al.*, pp. 9750–9765.

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## EDITORIAL

9597

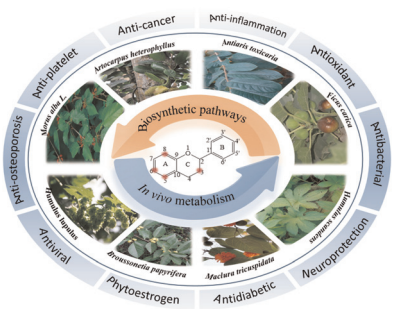
**Defining the intersection between food and human health – an updated scope for *Food & Function***

## REVIEWS

9598

**Chemistry, bioactivities, structure–activity relationship, biosynthesis and metabolism of prenylated flavonoids in Moraceae plants**

Ning Li, Wenjing Lu,* Hui Ren and Zhiyong Chen*



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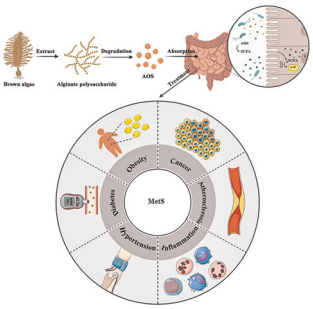
## REVIEWS

9632

**The therapeutic effect and possible mechanisms of alginate oligosaccharide on metabolic syndrome by regulating gut microbiota**

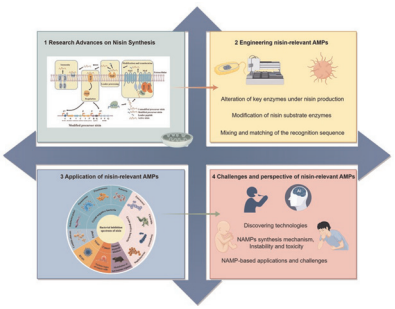
Jingyi Wang, Zixuan Zhang, Tong Dai, Ziheng Zhang, Qingfeng Zhang, Jingtong Yao, Lijing Wang,* Ningning He* and Shangyong Li*




9662

**Nisin-relevant antimicrobial peptides: synthesis strategies and applications**

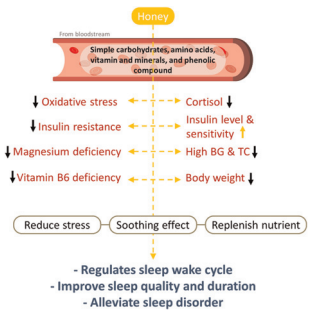
Lin Yuan, Shengbo Wu, Kairen Tian, Shengli Wang, Hao Wu* and Jianjun Qiao*




9678

**Exploring honey's potential as a functional food for natural sleep aid**

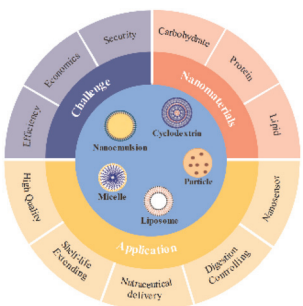
Muhammad Faiz Zulkifli, Mohammad Asyraf Adhwa Masimen, P. M. Ridzuan and Wan Iryani Wan Ismail*




9690

**Food nanotechnology: opportunities and challenges**

Zhiyu Yan, Songyi Lin, Fanghan Li, Jiaxin Qiang and Simin Zhang*



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## REVIEWS

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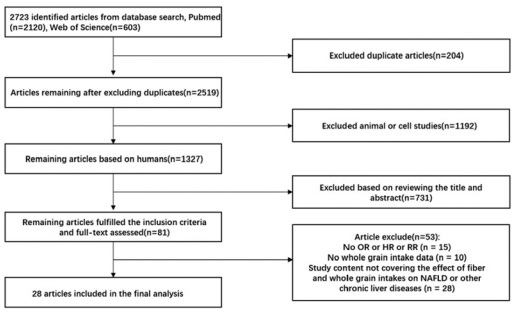
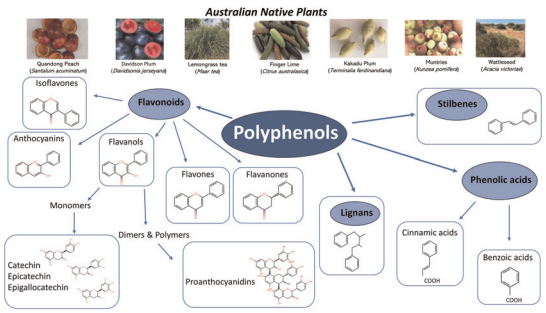



**Effect of whole grain and fiber consumption on chronic liver diseases: a systematic review and meta-analysis**

Yanni Zhang, Jing Sui,* Ying Xu, Ling Pan, Hui Xia and Guiju Sun

9718

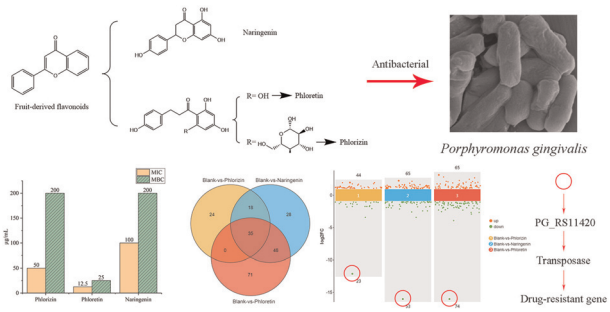



**The phytochemical composition and unexplored potential of Australian native plants for application in physical activity-related muscle recovery and inflammation: a literature review**

Brittany Harriden, Kathryn Speer, Domenico Sergi, Chris I. R. Gill, Jelena Popović-Djordjević, Andrew McKune and Nenad Naumovski*

## PAPERS

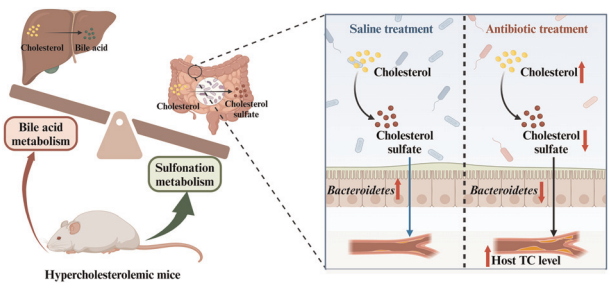
9734




**Comparative transcriptomics reveals the mechanism of antibacterial activity of fruit-derived dihydrochalcone flavonoids against *Porphyromonas gingivalis***

Desheng Wu, Lisha Hao, Xiaohan Liu, Xiaofeng Li* and Guanglei Zhao*

9750




**Sulfonation metabolism in the gut microbiota is the main metabolic pathway of cholesterol in hypercholesterolemic mice**

Guangtao Yan, Zehui Qin, Aitong Liu, Ziwei Huang, Xinhong Wang, Shanli Zhang, Xiaolin Xie, Xiaoqi Huang, Jiannan Chen, Yucui Li, Qingfeng Xie, Yuhong Liu, Ziren Su* and Jianhui Xie*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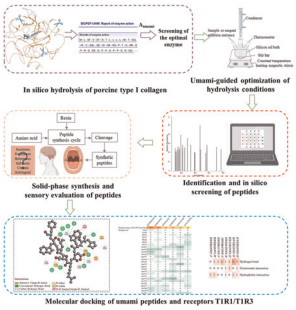
9766

**High-throughput discovery of umami peptides from pork bone and elucidation of their molecular mechanism for umami taste perception**

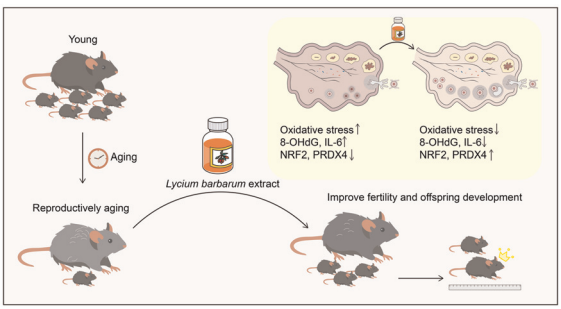
Yuxiang Gu, Yajie Niu, Jingcheng Zhang, Baoguo Sun, Zunying Liu, Xiangzhao Mao and Yuyu Zhang*




9779

***Lycium barbarum* berry extract improves female fertility against aging-related oxidative stress in the ovary**

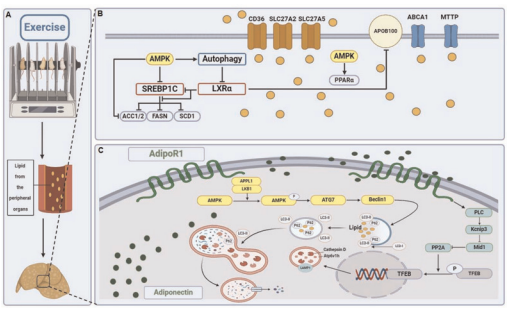
Chenyu Jiang, Ziyu Chen, Haoming Xiong, Xiao Yang, Weilin Liao, Geer Chen, Chen Huang, Guoyuan Zhu, Haijie Yu* and Lijuan Ma*




9796

**Exercise-promoted adiponectin secretion activates autolysosomes to protect the liver of ApoE$^{-/-}$ mice from a high-fat diet**

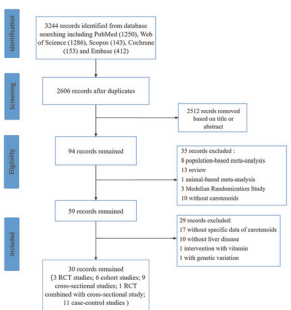
Weijia Wu, Ye Jian, Shunling Yuan, Xuan Li, Yingzhe Tang, Fanqi Zeng, Wenjing Liu, Zhe Zhao, Yirong Wang, Yiyang Wang and Wenfeng Liu*




9813

**A systematic review of dietary and circulating carotenoids and liver disease**

Bihuan Hu, Jing Sui, Ying Wang, Lihua Li, Daochen Gong, Zixuan Zhu, Wang Liao, Guiju Sun and Hui Xia*



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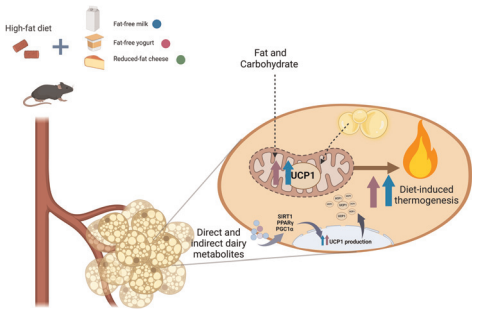
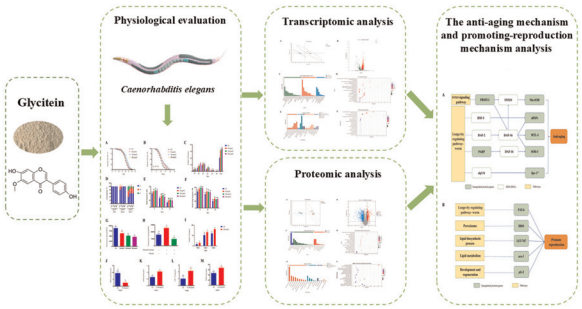



**Differential effects of milk, yogurt, and cheese on energy homeostasis and brown adipose tissue phenotype in high-fat diet-induced obese mice**

Emad Yuzbashian, Dineli N. Fernando, Siegfried Ussar and Catherine B. Chan*

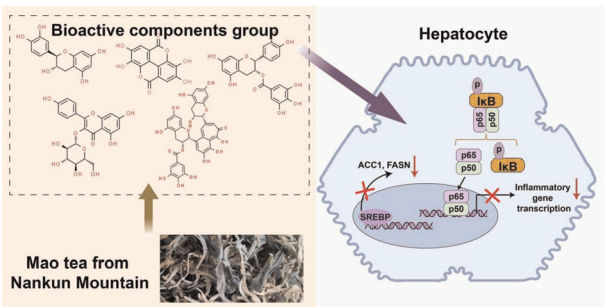
9849




**Physiological evaluation and transcriptomic and proteomic analyses to reveal the anti-aging and reproduction-promoting mechanisms of glycitein in *Caenorhabditis elegans***

Jianping Lei, Longbifei Cao, Yifeng Li, Qixin Kan, Lixin Yang, Weijie Dai, Guo Liu, Jiangyan Fu, Yunjiao Chen, Qingrong Huang, Chi-Tang Ho, Yong Cao* and Linfeng Wen*

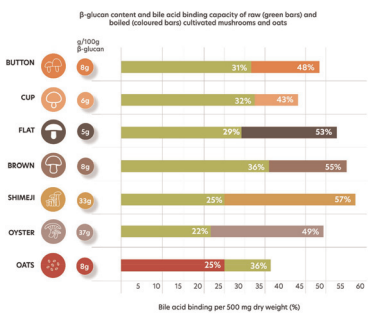
9863




**Effects of Mao tea from Nankun Mountain on nonalcoholic fatty liver disease in mice**

Weitao Zhang, Lianshun Feng, Peng Li, Aoyi Wang, Chunyan Dai, Yajuan Qi,* Junfeng Lu* and Xiaojun Xu*

9880




**β-Glucan content and *in vitro* bile-acid binding capacity of *Agaricus bisporus* and *Pleurotus* spp.**

Damien Paul Belobrajdic,* Henri Brook, Genevieve James-Martin and Welma Stonehouse



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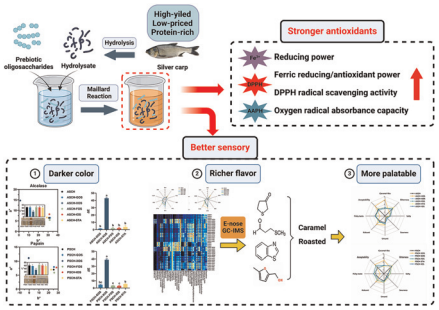
## PAPERS

9888

**Sensory improvement and antioxidant enhancement in silver carp hydrolysate using prebiotic oligosaccharides: insights from the Maillard reaction**

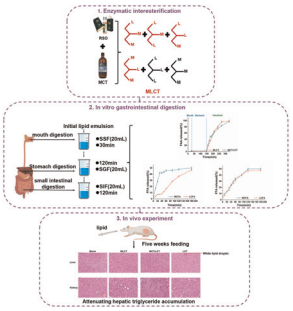
Peipei Dou, Kai Wang, Ning Ding, Yanyan Zheng, Hui Hong, Huaigao Liu, Yuqing Tan* and Yongkang Luo*




9903

**A novel synthesis method of medium- and long-chain triglyceride lipids from rubber seed oil catalyzed by enzymatic interesterification and its metabolism mechanism**

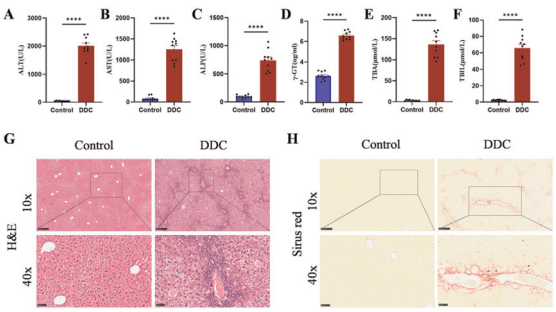
Jiahao Liu, Yinghui Zheng, Renwei Zhang, Yue Yu, Fang Wang, Li Deng* and Kai Wu*




9916

**Arachidonic acid enhances hepatocyte bile acid uptake and alleviates cholestatic liver disease by upregulating OATP1 expression**

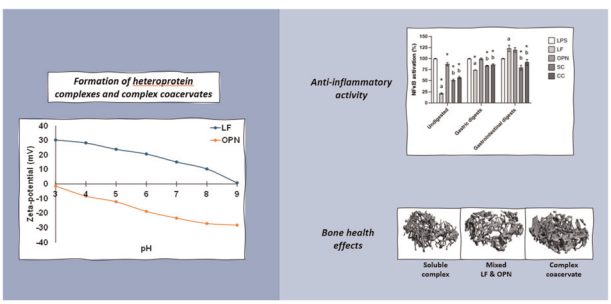
Yanlu Ma, Chen Zou, Yilan Yang, Miao Fang, Yunfeng Guan, Jianqi Sun, Yueqiu Gao,* Zhi Shang* and Xin Zhang*




9928

**The impact of complexation or complex coacervation of lactoferrin and osteopontin on simulated infant gastrointestinal digestion, intestinal inflammation, and *in vivo* bone development**

David A. Goulding,* Nicolas Bonnet, Marie-Noëlle Horcajada, Michael Baruchet, Flavien Bermont, Jonas Hauser, Simone Macrì, Edoardo Pisa, Chiara Nembrini, Karine Vidal, Nora M. O'Brien, James A. O'Mahony and Jonathan O'Regan



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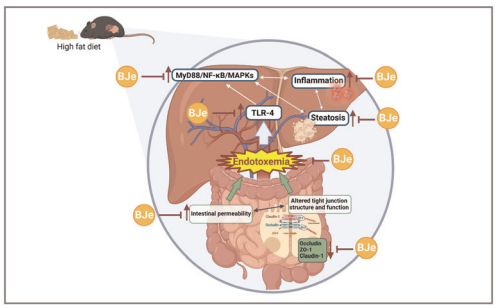
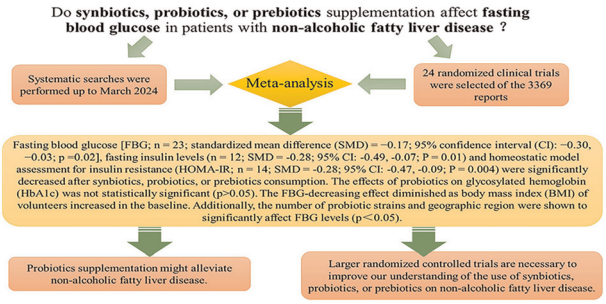



**A flavonoid-rich extract of bergamot juice improves high-fat diet-induced intestinal permeability and associated hepatic damage in mice**

Giovanni E. Lombardo, Michele Navarra* and Eleonora Cremonini*

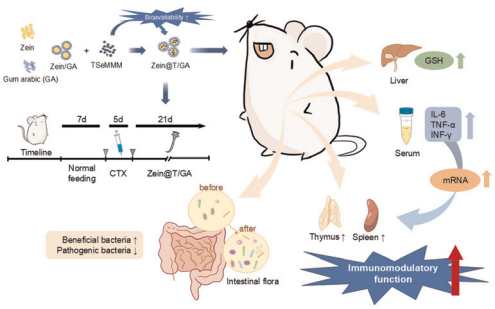
9954




**Meta-analysis of randomized controlled trials of the effects of synbiotics, probiotics, or prebiotics in controlling glucose homeostasis in non-alcoholic fatty liver disease patients**

Siqi Ding, Qing Hong, Yuanyue Yao, Minwen Gu, Jie Cui, Wenhui Li, Jian Zhang, Chengcheng Zhang, Jinchi Jiang* and Yonghong Hu

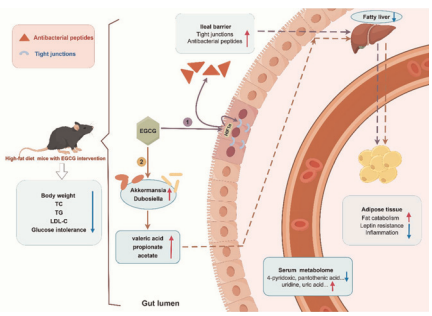
9972




**Zein and gum arabic nanoparticles: potential enhancers of immunomodulatory functional activity of selenium-containing peptides**

Wenqian Tang, Xieqi Luo, Fengjiao Fan, Xinyang Sun, Xiaoyi Jiang, Peng Li, Jian Ding, Qinlu Lin, Siming Zhao, Yunhui Cheng and Yong Fang*

9983




**Stabilization of hypoxia-inducible factor 1α and regulation of specific gut microbes by EGCG contribute to the alleviation of ileal barrier disorder and obesity**

Hui Ma,* Yuanyifei Wang, Jiayu Wei, Xiaochi Wang, Hui Yang and Shuo Wang*



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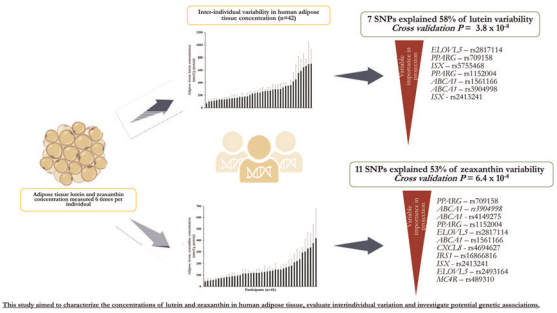
9995

## Characterization of the interindividual variability of lutein and zeaxanthin concentrations in the adipose tissue of healthy male adults and identification of combinations of genetic variants associated with it

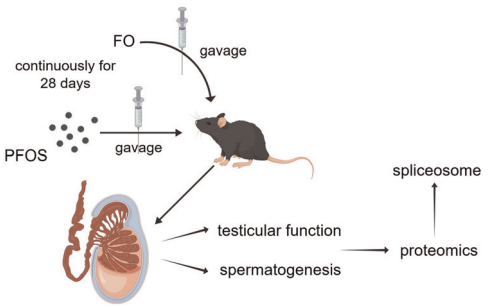
Mark Pretzel Zumaraga, Charles Desmarchelier, Beatrice Gleize, Marion Nowicki, Djaffar Ould-Ali and Patrick Borel*




10007

## Flaxseed oil attenuates PFOS-induced testicular damage by regulating RNA alternative splicing

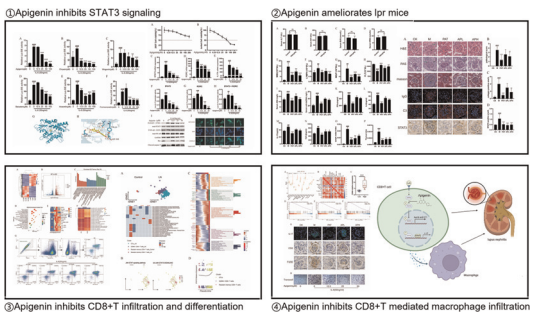
Jingyi Ren, Jiarui Liu, Jinshi Zuo, Zhenao Zhang, Dan Huang, Xuanyi Liu, Miaomiao Lu, Yadong Zhang, Yang Su and Yuxia Ma*




10020

## Apigenin ameliorates lupus nephritis by inhibiting SAT3 signaling in CD8$^+$ T cells

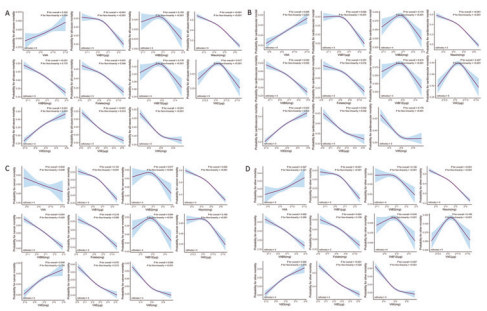
Jingqun Liu, Nianzhi Wang, Zhenyu Wu, Yihong Gan, Jinjun Ji, Zixuan Huang, Yu Du, Chengping Wen, Fengyuan Tian,* Yongsheng Fan* and Li Xu*




10037

## Comprehensive assessment on the association of dietary vitamins with all-cause and cardiovascular mortality among individuals with prediabetes: evidence from NHANES 1999–2018

Wenxuan Ren, Yang Li, Cihang Lu, Siying Liu, Ying Shao and Xiaoguang Shi*



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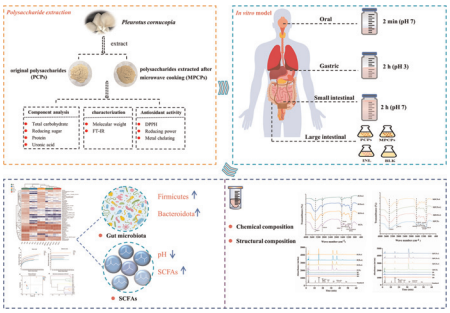
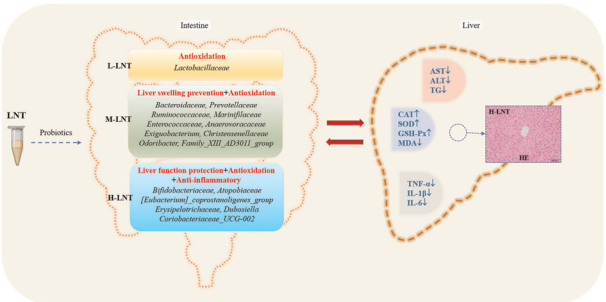


## *In vitro* simulated digestion and fermentation behaviors of polysaccharides from *Pleurotus cornucopiae* and their impact on the gut microbiota

Chunping Jiang, Hongyu Li, Junqi Li, Guangying Zou, Cheng Li, Zhengfeng Fang, Bin Hu, Wenjuan Wu, Xiaolin Li, Zhen Zeng, Qingying Luo* and Yuntao Liu*

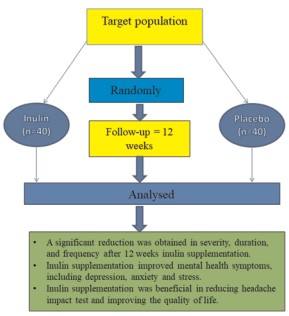
10067



## The dose-dependent mechanism behind the protective effect of lentinan against acute alcoholic liver injury *via* proliferating intestinal probiotics

Fangjia Zhao, Min Li, Mingyue Luo, Meng Zhang, Yahong Yuan, Haili Niu* and Tianli Yue*

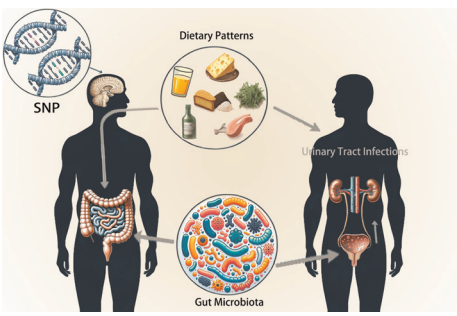
10088




## A randomized, double-blind, placebo-controlled parallel trial to test the effect of inulin supplementation on migraine headache characteristics, quality of life and mental health symptoms in women with migraine

Mahdi Vajdi, Fariborz Khorvash and Gholamreza Askari*

10099




## Dietary influences on urinary tract infections: unraveling the gut microbiota connection

Yifan Du, Xiuyuan Sui, Yang Bai, Zhiyuan Shi, Bin Liu, Zeyuan Zheng, Zhengying Zhang, Yue Zhao, Jiqing Wang, Qian Zhang, Yuanhang Zhu, Qing Liu, Mingshan Wang, Huimin Sun* and Chen Shao*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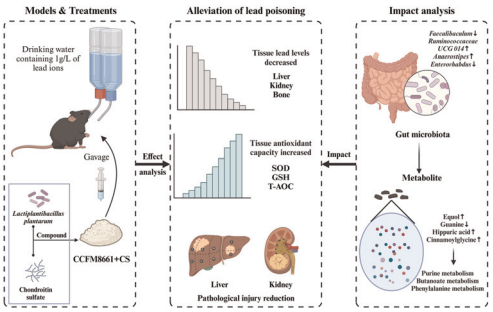
10110

## Lead toxicity mitigation effect of a *Lactiplantibacillus plantarum*–chondroitin sulfate complex revealed by microbiome and metabolomic analyses

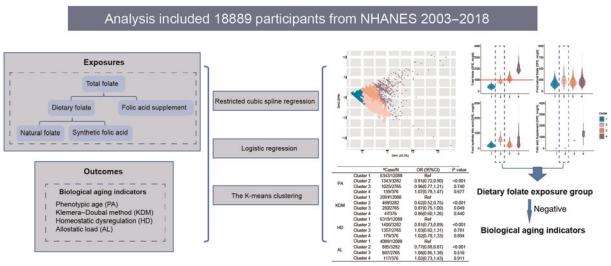
Feng Chen, Jiani Pan, Leilei Yu,* Chuan Zhang, Jianxin Zhao, Fengwei Tian, Qixiao Zhai and Wei Chen




10121

## Relationship of dietary natural folate and synthetic folic acid co-exposure patterns with biological aging: findings from NHANES 2003–2018

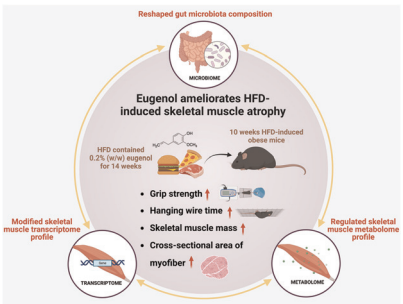
Jia Zhang, Xuan-Yang Wang, Shuo Yang, Xun Xie, Si-Jia Pan, Xiao-Qing Xu and Ying Li*




10136

## Dietary eugenol ameliorates long-term high-fat diet-induced skeletal muscle atrophy: mechanistic insights from integrated multi-omics

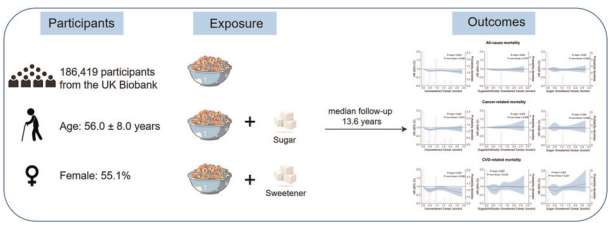
Mengjie Li, Jingya Guo, Yige Qin, Yujie Lao, Seong-Gook Kang, Kunlun Huang and Tao Tong*




10151

## Association of unsweetened and sweetened cereal consumption with all-cause and cause-specific mortality: a large prospective population-based cohort study

Lei Zhang, Chunhui Ma, Hao Huang, Dapeng Li, Ding Zhang, Tianqi Wu, Minjie Chu* and Fulan Hu*



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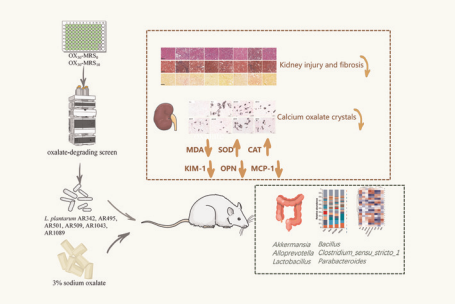
## PAPERS

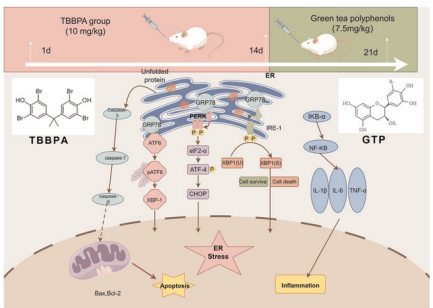
10163




**Screening of oxalate-degrading probiotics and preventive effect of *Lactiplantibacillus plantarum* AR1089 on kidney stones**

Mingyue Xu, Yugang Qin, Yongjun Xia, Guangqiang Wang, Zhiqiang Xiong, Xin Song and Lianzhong Ai*

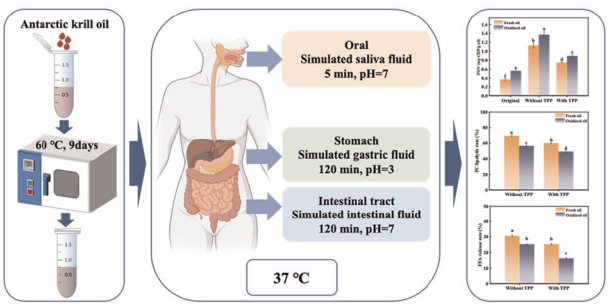
10179




**Green tea polyphenols alleviate TBBPA-induced gastric inflammation and apoptosis by modulating the ROS-PERK/IRE-1/ATF6 pathway in mouse models**

Jie Yang, Yuan Geng, Bing Zhao, Tianjing Liu, Ji-long Luo* and Xue-jiao Gao*

10190




**Influence of lipid oxidation on the digestive efficiency of Antarctic krill oil: insights from a simulated gastrointestinal digestion model**

Ruiying Wang, Xin Sun, Guimei Dong, Chao Guo, Fawen Yin, Huilin Liu, Liang Song and Dayong Zhou*

## CORRECTION

10200

**Correction: Physiological evaluation and transcriptomic and proteomic analyses to reveal the anti-aging and reproduction-promoting mechanisms of glycitein in *Caenorhabditis elegans***

Jianping Lei, Longbipei Cao, Yifeng Li, Qixin Kan, Lixin Yang, Weijie Dai, Guo Liu, Jiangyan Fu, Yunjiao Chen, Qingrong Huang, Chi-Tang Ho, Yong Cao* and Linfeng Wen*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