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# Food & Function

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## IN THIS ISSUE

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**Cover**
See Yu Zhang *et al.*, pp. 4278–4290.

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**Inside cover**
See Xin Rui *et al.*, pp. 4291–4302.

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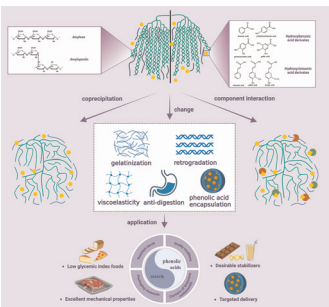
## REVIEWS

4202

**The interaction between starch and phenolic acids: effects on starch physicochemical properties, digestibility and phenolic acids stability**

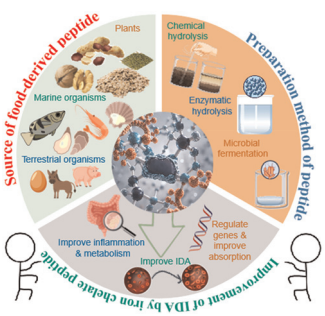
Faying Zheng, Feiyue Ren, Xuchun Zhu, Zhaowei Han, Yuanqiang Jia, Xiaoyong Liu, Bingyu Chen* and Hongzhi Liu*




4226

**Harnessing food-derived bioactive peptides for iron chelation: an alternative solution to iron deficiency anemia**

Bing-De Zheng* and Mei-Tian Xiao



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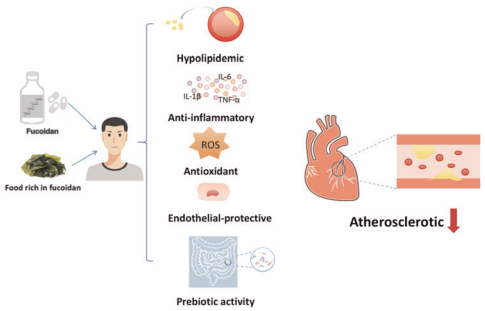
## REVIEWS

4242

**Therapeutic potential of fucoidan in atherosclerosis: a review**

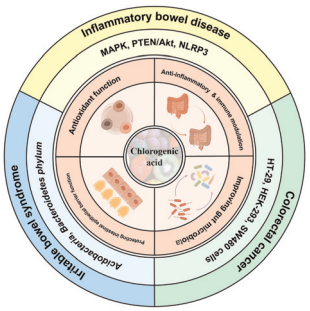
Qiujian Feng, Jinye Ma, Xuefan Jiang, Wei Wei, Dongchen Xu, Yu Cao* and Hui Pei*




4257

**Chlorogenic acid and intestinal health: mechanistic insights and therapeutic applications**

Jinzhao Xu, Xiao Zhao,* Shuo Yang, Mengqi Tang, Runan Zhao and Shumeng Hu*

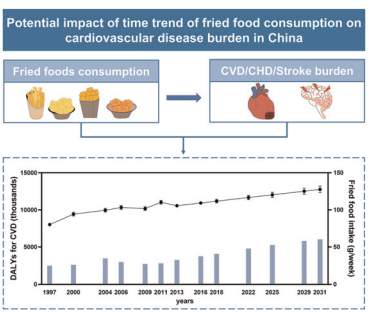



## PAPERS

4278

**Potential impact of the time trend of fried food consumption on the cardiovascular disease burden in China**

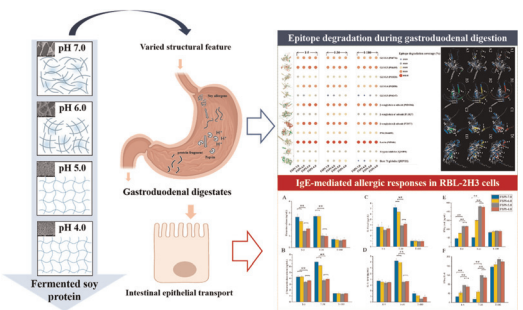
Anli Wang, Yang Ao, Xiaohui Liu, Xuzhi Wan, Pan Zhuang, Jingjing Jiao and Yu Zhang*




4291

**Insight into the effect of lactic acid fermentation on soy protein immunoreactivity: emphasizing the difference in epitope destruction of varied fermentation terminal pH levels during gastrointestinal digestion**

Yaqiong Wang, Qiyuan Lu, Qiuqin Zhang, Runqiang Yang, Wei Li and Xin Rui*



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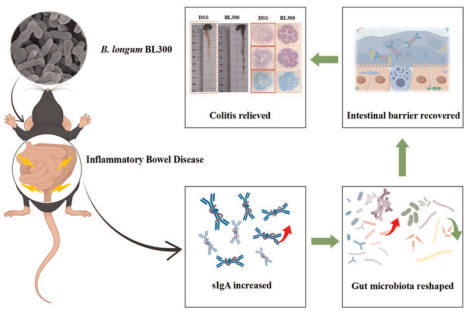
## PAPERS

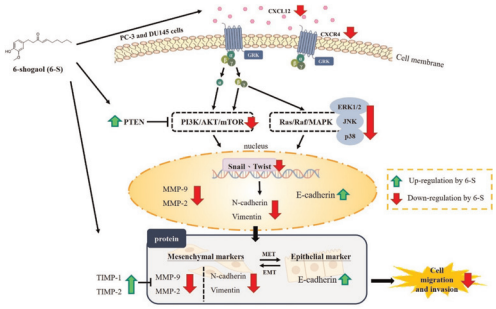
4303




***Bifidobacterium longum* BL300 alleviates DSS-induced Colitis by promoting IgA-mediated Gut Microbiota homeostasis**

Haowen Jin, Hui Wang, Xin Feng, Xin Ma, Zhengyuan Zhai* and Yanling Hao*

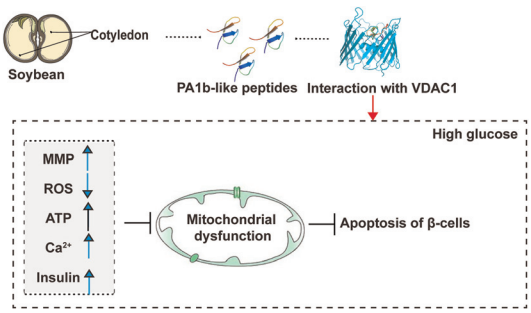
4315




**6-Shogaol inhibits the cell motility of prostate cancer cells by suppressing the PI3K/AKT/mTOR and Ras/Raf/MAPK pathways with comparable effects to paclitaxel treatment**

Pei-Jhen Cai, Sheng-Yi Chen, Yi-Fan Chen and Gow-Chin Yen*

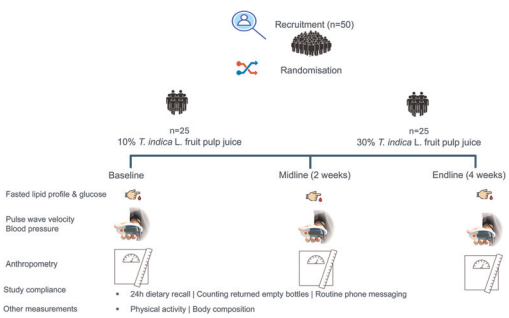
4325




**PA1b-like peptides alleviate mitochondrial dysfunction induced by glucose toxicity through interaction with VDAC1 in β-cells**

Huizhong Huang, Xinyu Zeng, Liying Zhang, Hongchang Cheng, Kanghong Hu, Xiaoke Shang* and Chenguang Yao*

4343




**Effect of tamarind (*Tamarindus indica* L.) on the cardiometabolic health of patients living with HIV and elevated triglyceride levels: a dose–response double-blind, randomized exploratory trial**

Tonny Kiyimba, Fred Kigozi, Michael Bamuwamye, Peter Yiga, Kathrine Nakatudde, Winnie Nabbanja, Patrick Ogwok, Toon Verdonck, Deirdre Cabooter, Bart Van der Schueren and Christophe Matthys*



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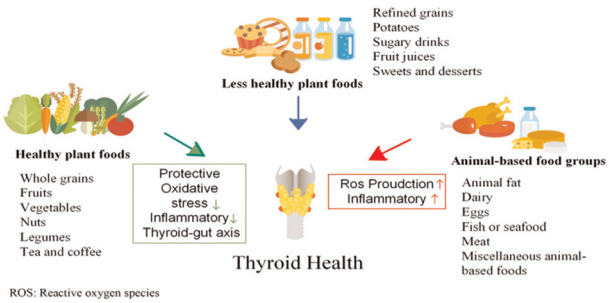
4356

**Association between the quality of plant-based diets and risk of thyroid dysfunction**

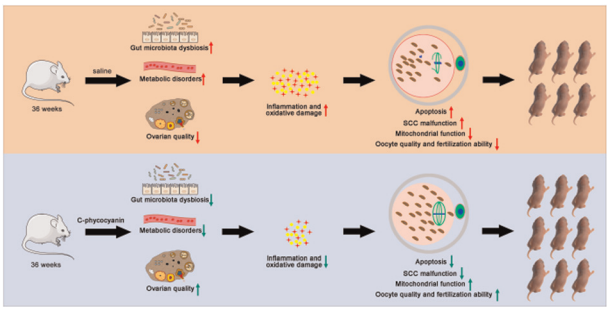
Juanjuan Zhang, Yuchuan He, Zhiyuan Tang, Chang Liu, Baojun Song, Chao Liu* and Yang Xia*




4367

**Multi-omics analysis reveals the attenuation effect of C-phycocyanin on aging-induced subfertility in female mice**

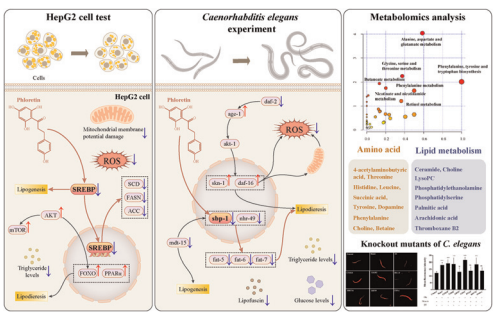
Zhe Han, Xin Wen, Lei Ge, Cheng-Jie Zhou, Dui Sun, Qi Yang, Fang-Rui Xue, Kang Ding and Cheng-Guang Liang*




4383

**The natural dihydrochalcone phloretin reduces lipid accumulation *via* downregulation of IIS and *sbp-1*/*SREBP* pathways in HepG2 cells and *Caenorhabditis elegans***

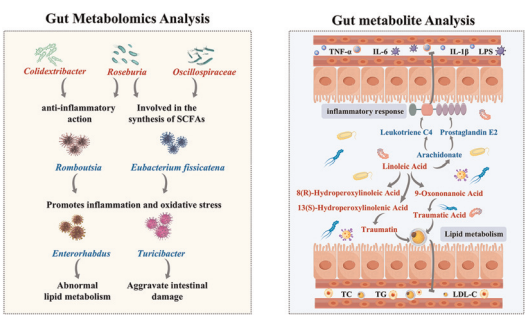
Qi Gu, Litao Wang, Mingyue Xu, Wanmei Zhou, Guosheng Liu, Haiting Tian, Thomas Efferth, Chenlu Wang* and Yujie Fu*




4399

**Exploring the lipid-lowering effects of cinnamic acid and cinnamaldehyde from the perspective of the gut microbiota and metabolites**

Xueke Wang, Tianxing Li, Ling Dong, Yilin Li, Hong Ding, Jing Wang, Yuqi Xu, Wenlong Sun* and Lingru Li*



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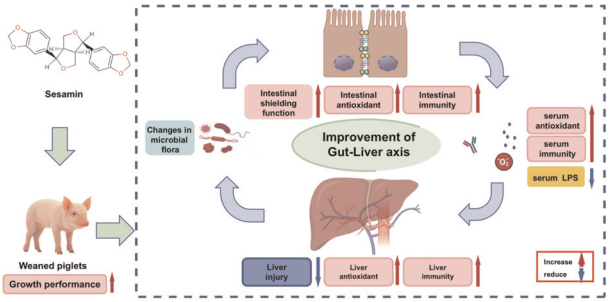
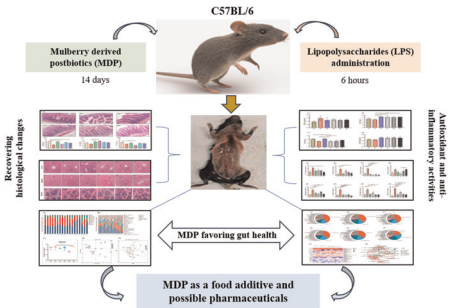



**Sesamin improved growth and overall health in young animals by enhancing gut–liver axis function**

Chen Chen, Min Qi, Zhiran Xu, Jincheng Wen, Wenjie Tang, Hui Diao, Zhangcheng Li, Yunyun Chu, Fu Feng and Zhiru Tang*

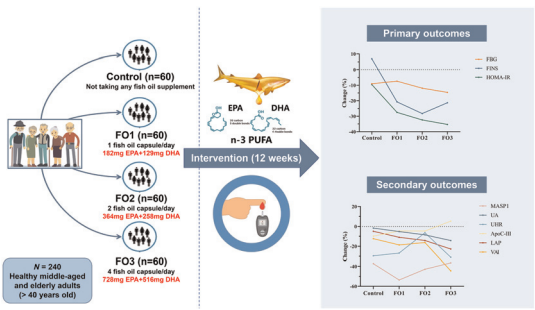
4437




**Mulberry-derived postbiotics alleviate LPS-induced intestinal inflammation and modulate gut microbiota dysbiosis**

Zaheer Abbas, Baseer Ahmad, Yucui Tong, Jing Zhang, Shuang Wu, Junyong Wang, Zhenzhen Li, Tianqi Liu, Yicong Liu, Xubiao Wei, Dayong Si* and Rijun Zhang*

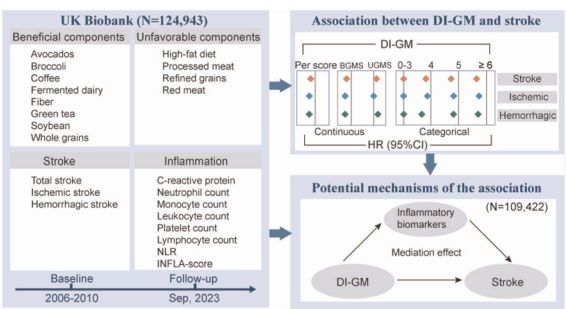
4451




**Effects of fish oil intervention on type 2 diabetes early risk novel biomarkers in healthy middle-aged and elderly adults: a double-blind randomized controlled trial**

Zhaoyang Nian, Yuting Lin, Wei Tang, Chunxia Quan, Jing Wen, Xinqian Jin, Zheqing Zhang and Limei Mao*

4465




**Associations between dietary index for gut microbiota and stroke, and the mediating role of inflammation: a prospective cohort study**

Min Liu, Meng Han, Yan Fu, Dan-Dan Zhang, Yong-Li Zhao, Qiong-Yao Li, Hao Hu, Hai-Hua Guo, Liang-Yu Huang, Chen-Chen Tan, Wei Xu and Lan Tan*



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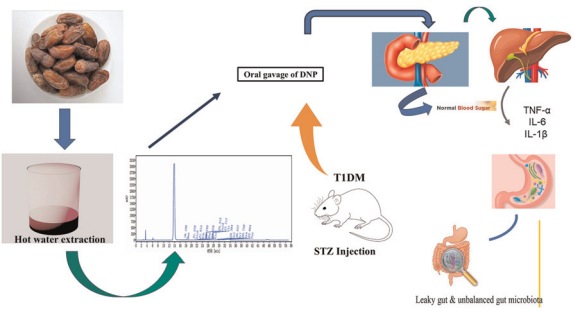
## PAPERS

4477

**Deglet Noor date derived polysaccharides lower blood glucose levels and modulate the gut microbiota in a streptozotocin-induced type-1 diabetic mouse model**

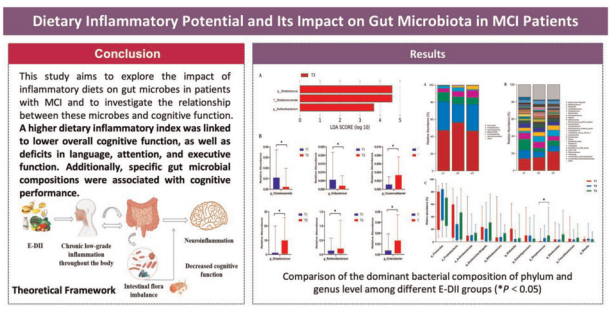
Hidayat Ullah, Yamina Alioui, Xiaoye Liu, Sharafat Ali, Bing Tang, Hongmei Lu, Yongdui Ruan* and Xianjing Hu*




4493

**Dietary inflammatory potential and its impact on gut microbiota in patients with mild cognitive impairment**

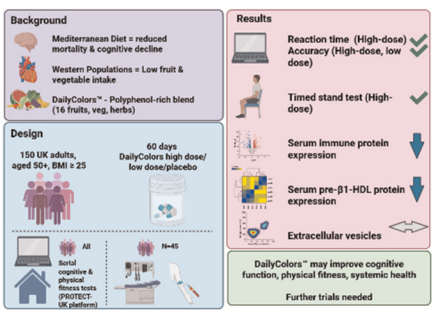
Jinxiu Liu, Yuping Zhang, Xiaoqi Wu, Xiuli Li, Zhaoyi Hou, Bixia Wang, Lili Chen,* Fan Lin* and Mingfeng Chen*




4505

**Effects of the DailyColors™ polyphenol supplement on serum proteome, cognitive function, and health in older adults at risk of cognitive and functional decline**

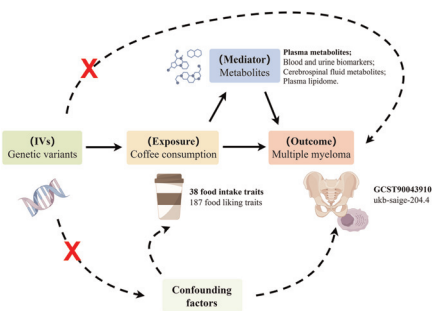
Mary O'Leary,* Joanna L. Bowtell, Megan Richards, Esra Bozbaş, Abbie Palmer, Kate Stych, Monica Meng, Adam Bloomfield, Lauren Struszczak, Jack Pritchard, Celeste Lugtmeijer, George Vere, Raif Yücel, Ana Rodriguez Mateos, Zicheng Zang, Jonathan C. Y. Tang, Clive Ballard and Anne Corbett*




4521

**Genetic association between coffee consumption and multiple myeloma mediated by plasma metabolites: a Mendelian randomization study**

Shichong Lin, Dan Zhou, Hua Zhu, Gaoxiang Huang, Menglu Yu, Shaomin Chen, Junjie Wang and Weiqiang Xia*



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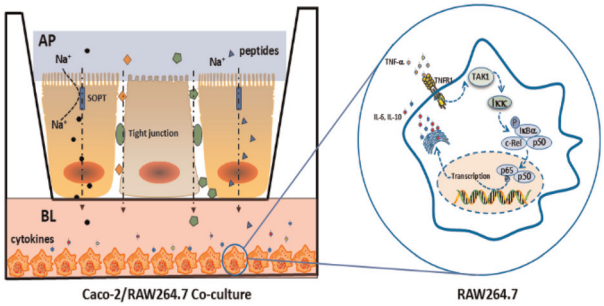
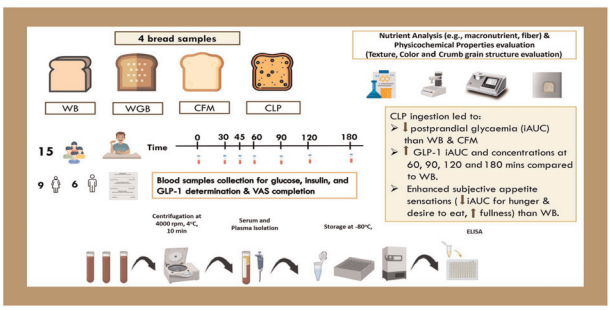



**Absorption and immune-modulating effects of active peptides from *Hericium erinaceus* proteins in an *in vitro* gastrointestinal model**

Junmiao Zhang, Qiuhui Hu,* Gaoxing Ma, Anxing Su, Liyan Zhao, Hengjun Du and Hang Xiao

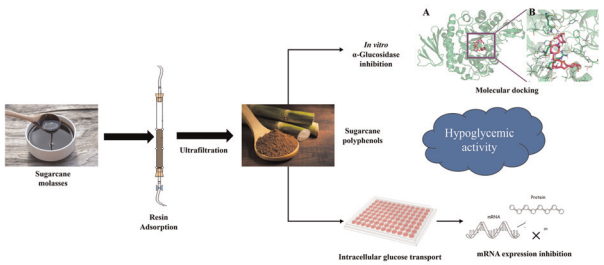
4548




**Impact of flour particle size and origin on the bread structure and the postprandial glycemic, insulinemic and appetite responses in healthy adults**

Maria-Christina Kanata, Amalia E. Yanni,* Chrysi Koliaki, Ioanna A. Anastasiou, Nikolaos Tentolouris and Vaios T. Karathanos

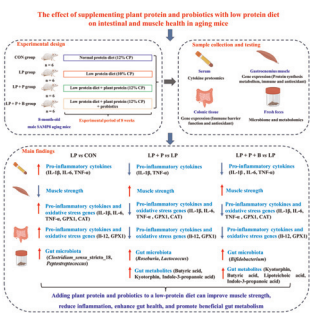
4562




**Hypoglycemic potential of sugarcane molasses-derived polyphenols: exploring the hypoglycemic mechanisms through *in vitro* α-glucosidase inhibition and intracellular glucose transport inhibition**

Xu Zhao, Jianwen Zhao and Chun Cui*

4575




**Supplementation of low-protein diets with plant protein and probiotics enhances muscle health by regulating gut microbiota and metabolomic profiles in SAMP8 mice**

Ruyi Han, Limin Ouyang, Chenggang Yin, Long Cai, Qiming Wu, Liang Chen, Jun Du, Xilong Li, Zhigang Zhu* and Yu Pi*



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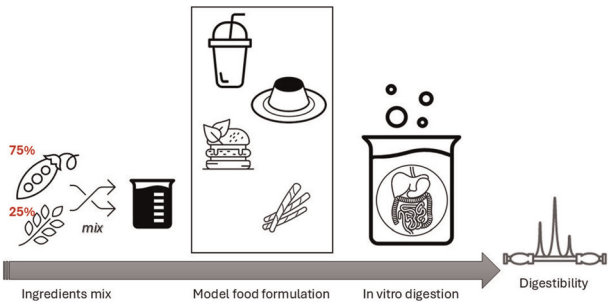
## PAPERS

4593

**INFOGEST *in vitro* digestion: protein breakdown in relation to food composition and moisture content**

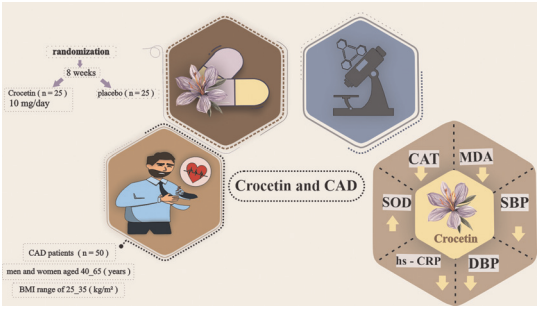
Alessandra Ferrara, Karen Mariel Treviño, Giovanni D'Auria, Sefora Esposito, C. Valeria L. Giosafatto, Giulia Basile, Raffaele Romano, Chiara Nitride* and Pasquale Ferranti




4604

**The effect of crocetin (a saffron carotenoid) supplementation on antioxidant and inflammatory indexes and serum leptin concentration in patients with coronary artery disease**

Faezeh Moeini Badi, S. Zahra Bathaie, Fatemeh Borazjani,* Seyed Ahmad Hosseini, Mohammad Ali Sheikhi, Sheikh Mohammed Shariful Islam, Kambiz Ahmadi Angali, Mohammadreza Taban Sadeghi and Parisa Rahimi




## COMMENTS

4615

**Comment on "Circulating fatty acids and risk of severe non-alcoholic fatty liver disease in the UK biobank: a prospective cohort of 116 223 individuals" by P. Zhuang, Y. Ao, X. Liu, H. Ye, H. Li, X. Wan, Y. Zhang and J. Jiao, *Food & Function*, 2024, 15, 10527**

Zhitao Chen, Yangjun Gu, Shusen Zheng* and Qiyong Li*

4618

**Reply to the 'Comment on "Circulating fatty acids and risk of severe non-alcoholic fatty liver disease in the UK biobank: a prospective cohort of 116 223 individuals"' by Zhitao Chen, Yangjun Gu, Shusen Zheng, and Qiyong Li, *Food & Function*, 2025**

Pan Zhuang, Yu Zhang and Jingjing Jiao*