

Food & Function

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Cover

See Monika Garg, Archana Bhatnagar *et al.*, pp. 3273–3295.

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Inside cover

See Fuliang Han *et al.*, pp. 3296–3307.

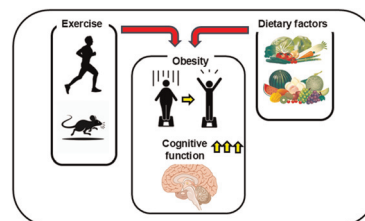
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REVIEWS

3243

Preventive effects against cognitive decline and obesity via the combination of dietary factors and exercise: can dietary factors replace or complement the beneficial effects of exercise?

Takanori Tsuda

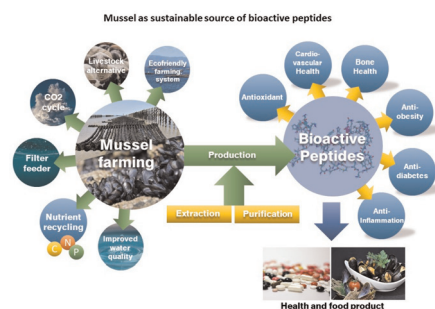


Combination of dietary factor intake and exercise enhances the preventive effect against obesity and improves cognitive function.

3255

Mussels as sustainable marine resources for bioactive peptides for health and the food industry

Indyaswan Tegar Suryaningtyas, Jasmadi, Lakshi Ayoda Dayarathne, Chathuri Kaushalya Marasinghe and Jae-Young Je*



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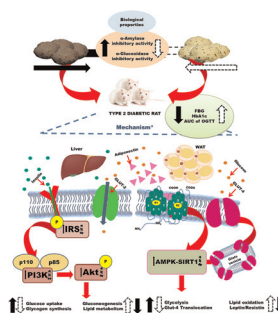
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3273

Anthocyanin-rich black wheat as a functional food for managing type 2 diabetes mellitus: a study on high fat diet-streptozotocin-induced diabetic rats

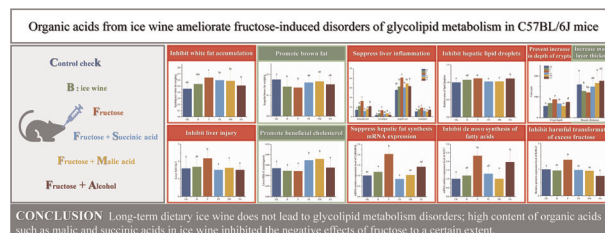
Vandita Tiwari, Akhil Kamboj, Bhawna Sheoran, Era Chaudhary, Mona Yadav, Anita Kumari, Meena Krishania, Usman Ali, Apoorv Tiwari, Monika Garg* and Archana Bhatnagar*



3296

Organic acids from ice wine ameliorate fructose-induced disorders of glycolipid metabolism in C57BL/6J mice

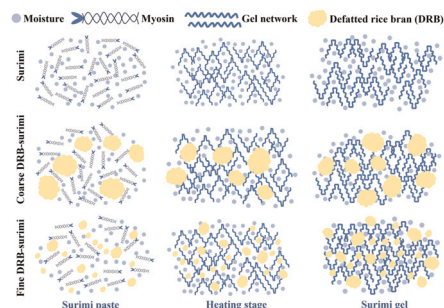
Yang Liu, Fuliang Han,* Xinyuan Ma, Luye Yang and Zhenan Shi



3308

Particle size effect of defatted rice bran on the gel properties and flavor of silver carp surimi gels

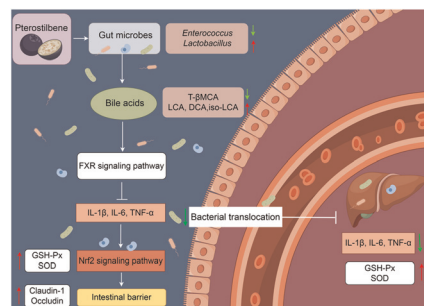
Yinghui Zhang, Ying Mao, Guoyan Yang, Zhili Ji, Zhan Wang, Cheng Guo, Weiping Jin, Wangyang Shen and Jinling Li*



3325

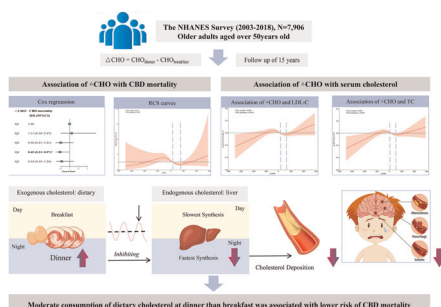
Pterostilbene attenuates intestinal barrier damage and secondary liver oxidative stress in a murine model of *Clostridium difficile* infection by regulating the gut microbiota

Hao Yang, Yanling Kuang, Lamei Wang, Xinru Ma, Javier A. Villafuerte Gálvez, Jing Lu, Yanfei Dai, Shimin Liu, Junhu Yao, Xinhua Chen* and Yangchun Cao*



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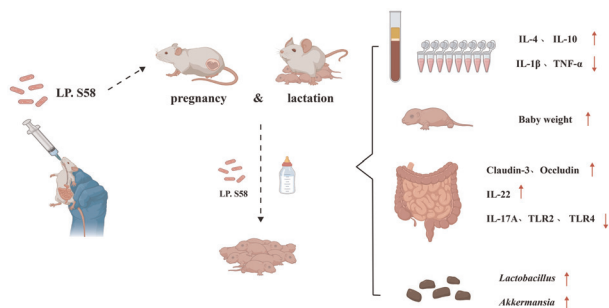
3344



Quantity and meal timing of dietary cholesterol intake and cerebrovascular disease mortality

Wanying Hou, Zhen Tian, Jiawei Fu, Weiqi Wang* and Changhao Sun*

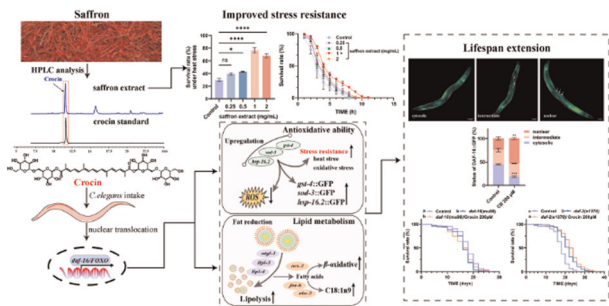
3355



Impact of maternal *Lactiplantibacillus plantarum* S58 supplementation on offspring rat immunity and gut health

Yu-Ting Zhao, Yu-Hang Jiang, Xi Zhang, Wei-Gang Xin, Xiao-Yong Chen, Jia-Jia Song, Chen Wang and Hua-Yi Suo*

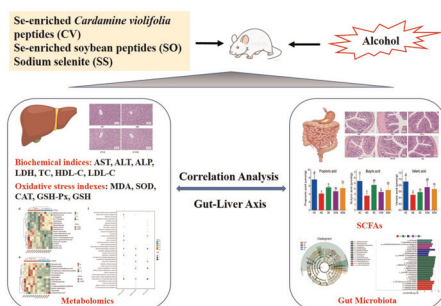
3369



Crocin extends lifespan by mitigating oxidative stress and regulating lipid metabolism through the DAF-16/FOXO pathway

Ai-Pei Li, Dan Li, Xin Tan, Rui Xu, Lin-Xi Mao, Juan-Juan Kang, Sheng-Hong Li* and Yan Liu*

3384



Se-containing compounds with different Se species alleviate alcoholic liver injury through regulating liver metabolism and modulating gut microbiota composition

Yiqing Li, Yue Li, Song Zhu,* Xin Cong, Dejian Huang, Ruipeng Yu and Shangwei Chen

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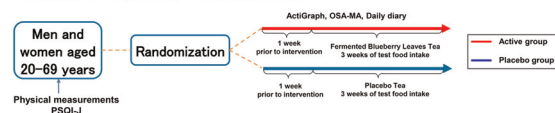
3400

Effects of dietary fermented blueberry leaf tea on sleep: a randomized double-blind controlled trial

Kentarō Shoji,* Yui Kitajima, Tomonori Yuasa and Yoshiko Hirakawa

Study Design: Randomized Double-Blind Controlled Trial

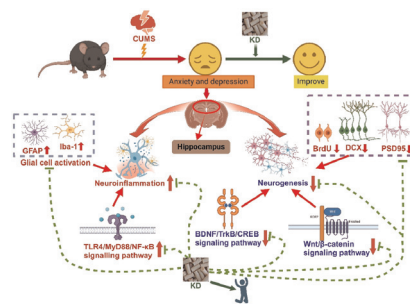
- Subjects: Men and women aged 20–69 years
- Study Period: 1 week prior to intervention + 3 weeks of test food intake
- Test Food: Fermented Blueberry Leaves Tea (active group). Placebo tea (placebo group)
- Consumed 3 packets per day
- Measurement Items: Physical measurements (height, weight, BMI), Pittsburgh Sleep Quality Index – Japanese version (PSQI-J), Sleep analysis using ActiGraph (wGT3X-BT), OSA Sleep Inventory (MA version)
- Primary Endpoint: "Sleep efficiency" measured by ActiGraph



3408

Ketogenic diet attenuates neuroinflammation and restores hippocampal neurogenesis to improve CUMS induced depression-like behavior in mice

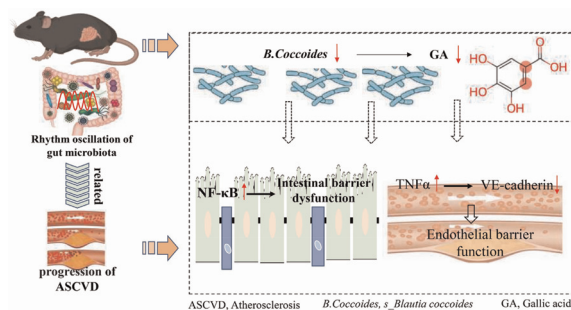
Jinyuan Liang, Jingxi Zhang, Jingyu Sun, Qingsheng Liang, Yingtong Zhan, Zhiyou Yang, Yongping Zhang, Leigang Jin, Chuanyin Hu* and Yun-Tao Zhao*



3423

Loss of diurnal oscillatory rhythms in gut microbiota correlates with progression of atherosclerosis

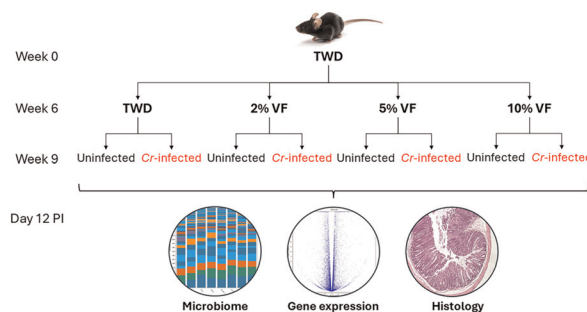
He Zhang, Xiaohan Zhang, Zihan Yun, Yang Chen, Suhua Cang, Yating Shao, Erteng Jia* and Renjin Chen*



3439

A type 4 resistant potato starch alters the cecal microbiome, gene expression and resistance to colitis in mice fed a Western diet based on NHANES data

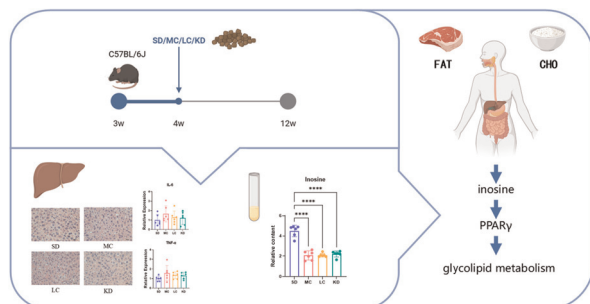
Elizabeth A. Pletsch, Harry D. Dawson, Lumei Cheung, Jack S. Ragonese, Celine T. Chen and Allen D. Smith*





Vitor Geniselli da Silva, Jane Adair Mullaney,
Nicole Clémence Roy, Nick William Smith, Clare Wall,
Callum James Tatton and Warren Charles McNabb*

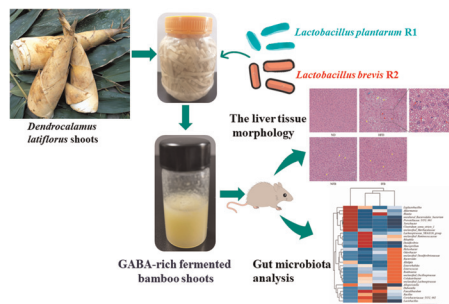
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Effect of different ratios of carbohydrate to fat intake on glucolipid metabolism in developing mice

Chongxuan Shao, Li Cheng,* Yan Hong, Zhaofeng Li,
Caiming Li, Xiaofeng Ban and Zhengbiao Gu

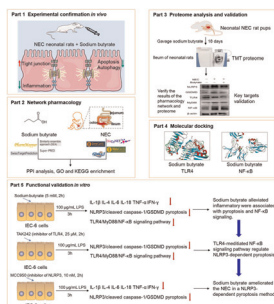
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Regulatory effects of lactic acid bacteria co-fermented *Dendrocalamus latiflorus* shoots on lipid-lowering functions and the gut microbiota in HFD-fed mice

Zhe Liu, Meilin Chen, Qingyan Pan, Xifeng Zuo,
Ailing Guo* and Yun Liu*

3508



Sodium butyrate attenuates experimental neonatal necrotizing enterocolitis by suppressing TLR4-mediated NLRP3 inflammasome-dependent pyroptosis

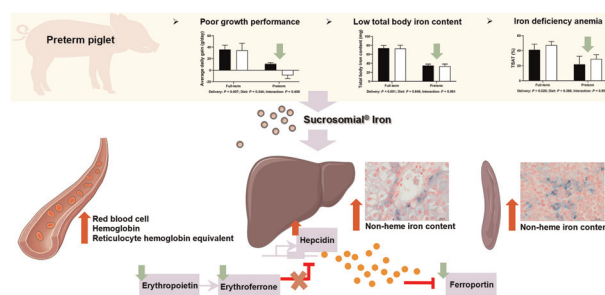
Yanan Gao, Liting Yang, Hongya Wu, Qianqian Yao,
Jiaqi Wang and Nan Zheng*

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Oral supplementation with Sucrosomial® Iron improves the iron status of preterm piglets delivered by cesarean section

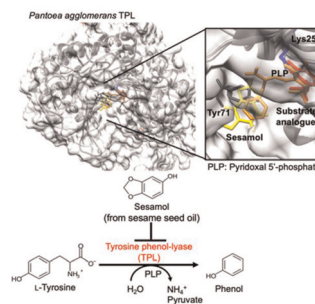
Xiuying Wang, Paweł Lipiński, Magdalena Ogtuska, Rafał Mazgaj, Jarosław Woliński, Dominika Szkopek, Kamil Zaworski, Zuzanna Kopeć, Beata Żelazowska, Germano Tarantino, Elisa Brilli and Rafał Radostaw Starzyński*



3542

Suppression of fecal phenol production by oral supplementation of sesamol: inhibition of tyrosine phenol-lyase by sesamol

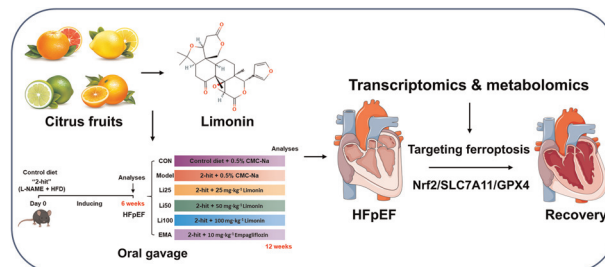
Daiki Oikawa, Zion Byun, Bunzo Mikami, Aina Gotoh, Toshihiko Katoh, Ryo Ueno, Aruto Nakajima, Satoshi Yamashita, Wakako Ikeda-Ohtsubo, Seiji Takahashi, Toshiyuki Waki, Koichi Kikuchi, Takaaki Abe, Takane Katayama* and Toru Nakayama*



3553

Dietary limonin ameliorates heart failure with preserved ejection fraction by targeting ferroptosis via modulation of the Nrf2/SLC7A11/GPX4 axis: an integrated transcriptomics and metabolomics analysis

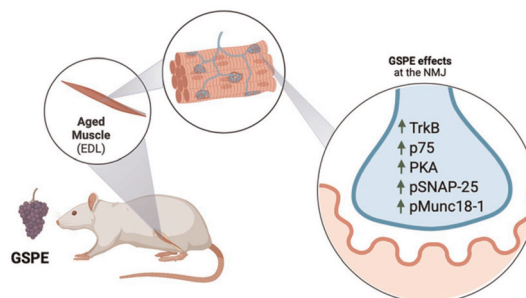
Xiaoqi Wei, Xinyi Fan, Wangjing Chai, Jinling Xiao, Jiong Zhao, Aolong He, Xianwen Tang,* Fanghe Li* and Shuzhen Guo*



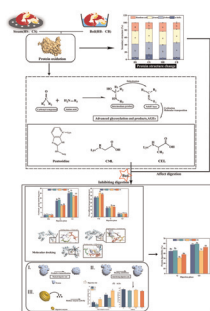
3575

Protective effects of grape seed procyanidin extract on neurotrophic and muscarinic signaling pathways in the aging neuromuscular junction

Marta Balanyà-Segura, Aleksandra Polishchuk, Laia Just-Borràs, Víctor Cillerós-Mañé, Carolina Silvera, Meryem Jami-ElHirchi, Montserrat Pinent, Anna Ardévol, Marta Tomàs, Maria A. Lanuza,* Erica Hurtado* and Josep Tomàs



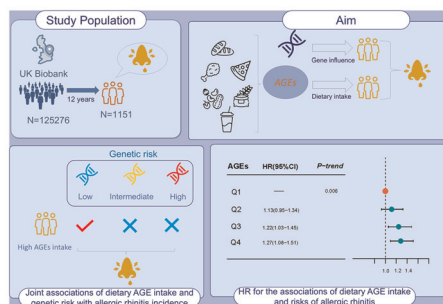
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The effects of different thermal processing methods on the protein structure and digestibility of *Procambarus clarkii*

Xuan Liu, Chuanfeng Hu, TianYu Xiao, Liu Du, Ziyi Tu, Wei Yu* and Yu Qiao*

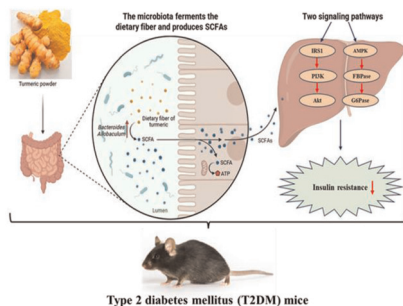
3604



Dietary advanced glycation end products may increase the incidence of allergic rhinitis depending on genetic susceptibility: a prospective cohort study

Haozhe Ding, Huanying He, Yebing Zhang, Jing Sun, Guochong Chen, Zhengfeng Ma, Xue Li, Yu Xia* and Zhongxiao Wan*

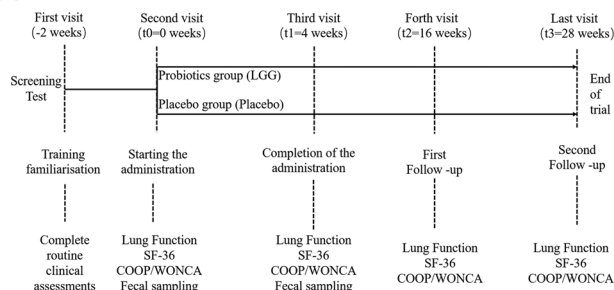
3613



Preventive effects of turmeric against HFD/STZ-induced type 2 diabetes in mice by activating IRS1/PI3K/Akt signaling in association with gut microbiota metabolism

Chengcheng Yang, Yao Du, Lusha Wei,* Zhengwei Tan, Ting Zhou, Lulu Wang, Xingbin Yang and Yan Zhao*

3627



Probiotics improve lung function and QOL in participants with exposure to fine particulate matter air pollution: a randomized, double-blind, placebo-controlled clinical trial

Yongcan Wu, Caixia Pei, Xiaomin Wang, Yilan Wang, Demei Huang, Shihua Shi, Shuo Kou, Zherui Shen, Shuiqin Li, Yacong He,* Fei Wang* and Zhenxing Wang*

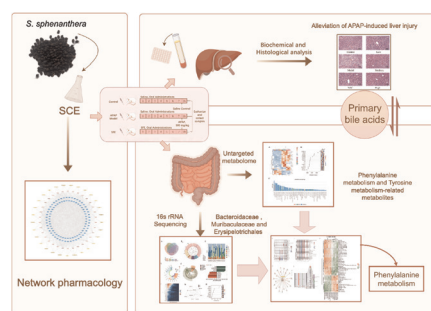


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3643

Hepatoprotective effects of wine-steamed *Schisandra sphenanthera* fruit in alleviating APAP-induced liver injury via the gut–liver axis

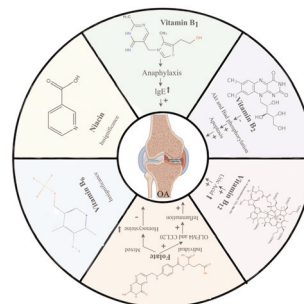
Xiaorui Wang, Xilin Fang, Jia Zhou, Han Pu, Qianqian Shang, Jianhua Li, Xiaolu Qin, Qiaozhu Zhao and Wei Gu*



3658

The unexpected role of B vitamins in osteoarthritis: a call for caution

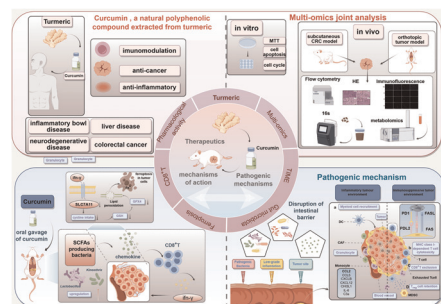
Jingkai Di, Liying Song, Lujia Liu, Yijing Di, Shuai Chen and Chuan Xiang*



3671

Curcumin exerts anti-tumor activity in colorectal cancer via gut microbiota-mediated CD8⁺ T Cell tumor infiltration and ferroptosis

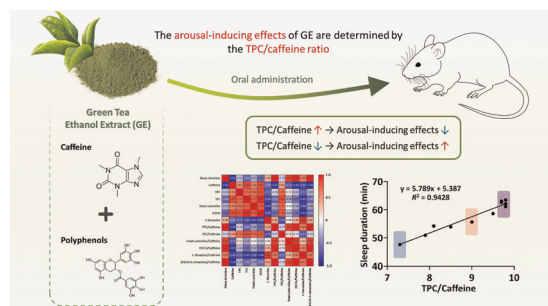
Hongli Zhou, Yupei Zhuang, Yuwei Liang, Haibin Chen, Wenli Qiu, Huiqin Xu* and Hongguang Zhou*



3694

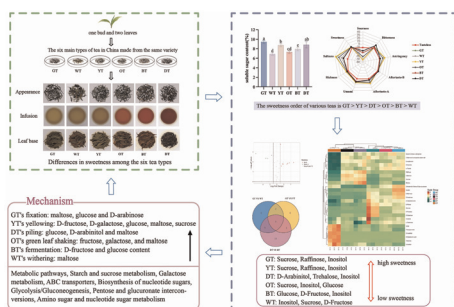
The polyphenol/caffeine ratio determines the arousal-inducing properties of the green tea ethanol extract

Duhyeon Kim, Seonghui Kim, Gibeom Choi, Gahyeon Lee, Junho Song, Young Taek Oh, Jang H. Youn and Suengmok Cho*



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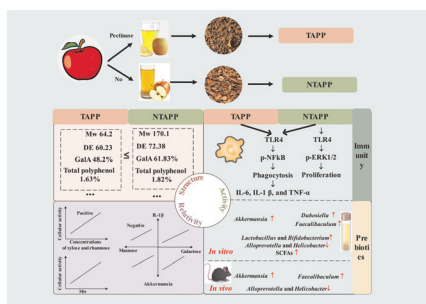
3707



Metabolomics-based analysis of the effects of differences in soluble sugars on the sweetness quality of six major tea types in China

Wen Li, Zhenbiao Zhang, Ruohong Chen, Lingli Sun, Xingfei Lai, Qiuhua Li, Mengjiao Hao, Suwang Zhang, Qian Li, Shili Sun* and Zhongzheng Chen*

3721



Effect of pectinase addition in juice processing on the structural characteristics, immunological activity and *in vitro* and *in vivo* prebiotic properties of apple pomace pectic polysaccharides

Fangfang Yue, Miao Jiang, Jiaxin Xu, Jingyi Ma, Xin Sun, Jihong Huang, Marat Muratkhan, Xin Wang* and Xin Lü*

EXPRESSION OF CONCERN

3736

Expression of concern: *Musa paradisiaca* inflorescence induces human colon cancer cell death by modulating cascades of transcriptional events

Arun K. B., Aravind Madhavan, Reshmitha T. R., Sithara Thomas and P. Nisha*

CORRECTION

3737

Correction: Encapsulation of *Lactobacillus acidophilus* NCDC 016 cells by spray drying: characterization, survival after *in vitro* digestion, and storage stability

Divyasree Arepally,* Ravula Sudharshan Reddy and Tridib Kumar Goswami*

