

Food & Function

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IN THIS ISSUE

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Cover
See Meihong Xu *et al.*,
pp. 4363–4374.

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REVIEWS

4312

Urinary track health benefits and phytochemical characterization based on a narrative review on cranberry and its innovative formulation in phospholipids

Francesco Scaglione

MAIN ACTION
prevents urinary tract
infections by preventing
bacteria from adhering to
the walls of the urethra and
proliferating.

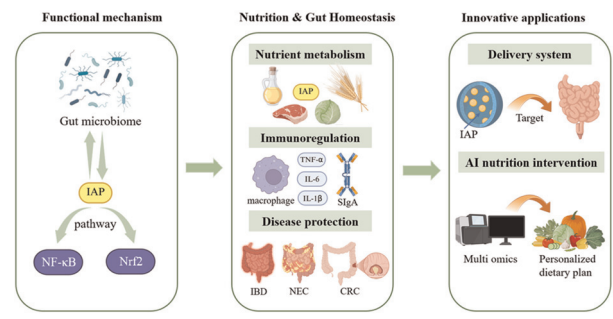


**PREVENTIVE EFFECTS AWAIT
DEFINITIVE PROOF:**
cancer
cardiovascular disease
tooth decay
weakening of bones
neuronal degeneration
peptic ulcers

4331

Intestinal alkaline phosphatase and gut health: insights into homeostasis, barrier protection, and immune signaling

Yue Pang, Jianing Tu, Haiyan Zhang, Jiahui Ma, Lin Zhang, Chenyu Xue, Yuhao Liu, Weichen Hong, Qiyun An, Mizhou Hui, Bailiang Li,* Na Dong* and Chenzhe Gao*



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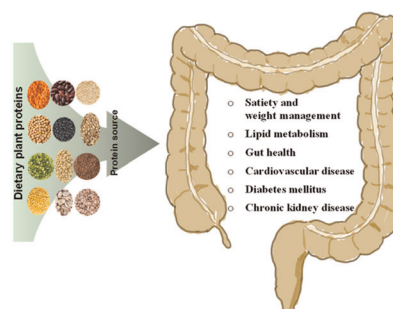
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REVIEWS

4348

Plant proteins for human health: the current status and future needs

Kun Gao, Shiyu Zhou, Jijia Rao and Bingcan Chen*

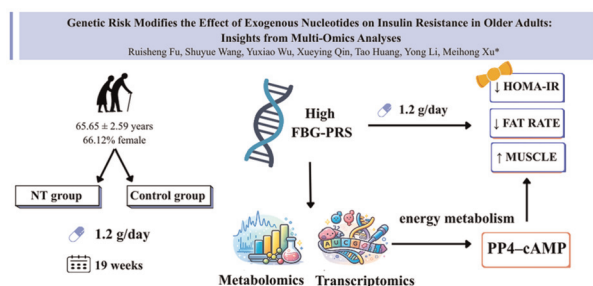


PAPERS

4363

Genetic risk modifies the effect of exogenous nucleotides on insulin resistance in older adults: insights from multi-omics analyses

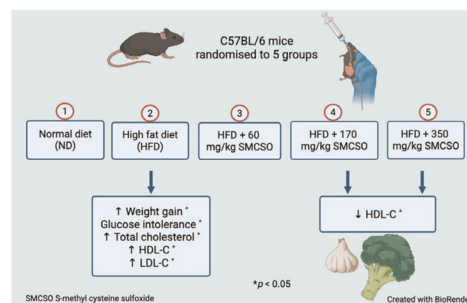
Ruisheng Fu, Shuyue Wang, Yuxiao Wu, Xueying Qin, Tao Huang, Yong Li and Meihong Xu*



4375

S-Methyl cysteine sulfoxide: its effects on cardiometabolic outcomes in high-fat fed C57BL/6 mice and relevance to human health

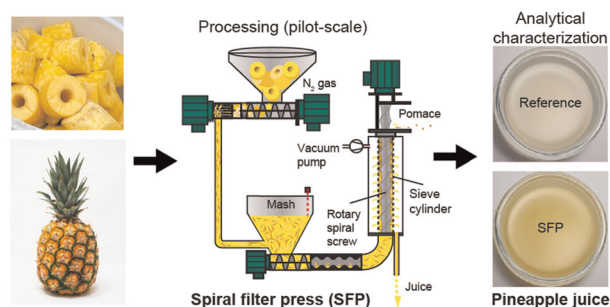
Caroline R. Hill,* Lois Balmer, Hayley Abbiss, Jonathan M. Hodgson, Joshua R. Lewis, Armaghan Shafaei* and Lauren C. Blekkenhorst



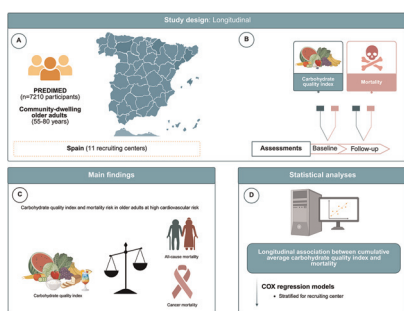
4389

Impact of pineapple (*Ananas comosus* [L.] Merr.) processing under low oxygen conditions using an innovative spiral filter press on juice physical characteristics and phytochemical composition

Patricia Esquivel, Víctor M. Jiménez, Vicky Bäumer, Jelena Nagypál, Peter Bach, Claus Patz, Michael Ludwig, Ralf Schweiggert and Christof Björn Steingass*



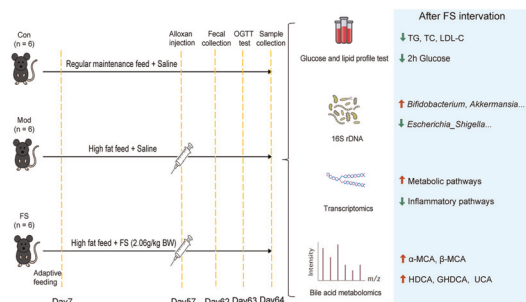
4404



Carbohydrate quality index and mortality risk in older adults at high cardiovascular risk

Héctor Vázquez-Lorente, Stephanie K. Nishi, Sangeetha Shyam,* Miguel A. Martínez-González, Dolores Corella, Ramón Estruch, Emilio Ros, Enrique Gómez-Gracia, Miquel Fiol, José Lapetra, Lluís Serra-Majem, Virginia Esteve-Luque, Nancy Babio, Montserrat Fitó, Estefanía Toledo, José V. Sorlí, Itziar Zazpe and Jordi Salas-Salvadó*

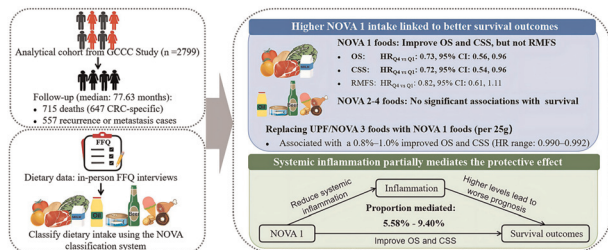
4415



A fructo-oligosaccharide and sea buckthorn complex ameliorates glucose and lipid metabolism in type 2 diabetic (T2DM) rats via metabolic and anti-inflammatory pathways

Ling Chen, Hualin Liu, Yanwu Chen, Qianya Xiao, Zijin Huang, Ziying Li, Xiaofei Zhang, Xueying Fan, Meichen Xiao, Xiaomin Li* and Yuan Yao Chen*

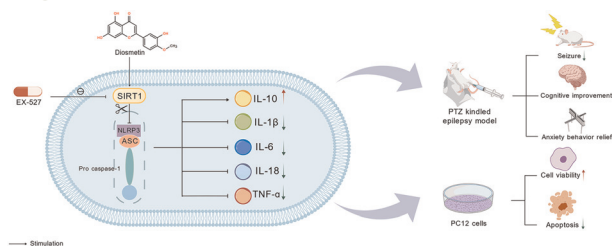
4437



Associations between degree of food processing, inflammatory biomarkers and colorectal cancer survival: a prospective cohort study

Ya-Wen Tan, Qing-Jian Ou, Huan Xu, Yuan-Yuan Chen, Fang-Ting Lin, Yu-Jing Fang* and Cai-Xia Zhang*

4449



Diosmetin's impact on epileptic seizures: a study on inflammatory pathways and neuronal health

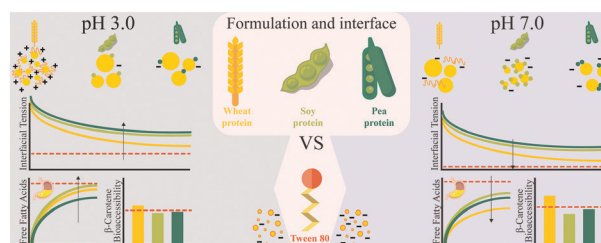
Jinhu Zhang, Xu Cao, Xinyi Li, Yi Ding, Yiyu Guo, Qianqian Geng, Jiayi Qiu, Yahong Cheng* and Jing Rao*



4464

Plant-protein stabilized emulsions as β -carotene delivery systems: colloidal stability and behaviour during *in vitro* digestion conditions

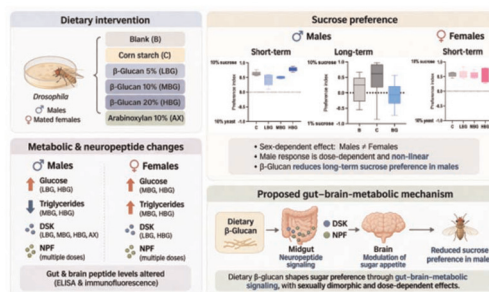
Mohsen Ramezani, Marga Amengual Ramon, Laura Salvia-Trujillo and Olga Martin-Belloso*



4484

Dietary β -glucan modulates sucrose preference via gut–brain neuropeptide signaling in a sex-dependent manner in *Drosophila*

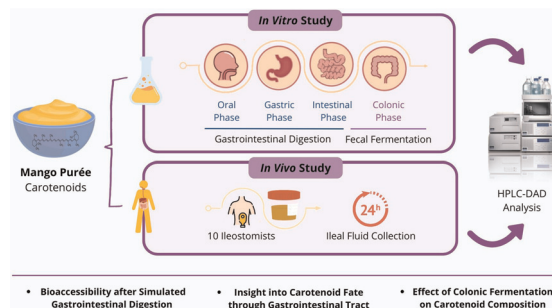
Jiaojiao Li, Wenyun Li, Yuanhao Li, Jiawen Liang, Yuwei Liu* and Gengsheng He*



4492

Bioaccessibility and colonic catabolism of carotenoids from mango purée (cv. Osteen): comparison of ileal fluid content and products of *in vitro* digestion

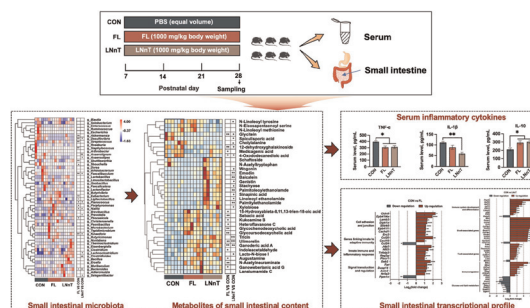
Salud Cáceres-Jiménez, Sara Dobani, L. Kirsty Pourshahidi, Chris I. R. Gill, José Luis Ordóñez-Díaz, José Manuel Moreno-Rojas, Alan Crozier and Gema Pereira-Caro*



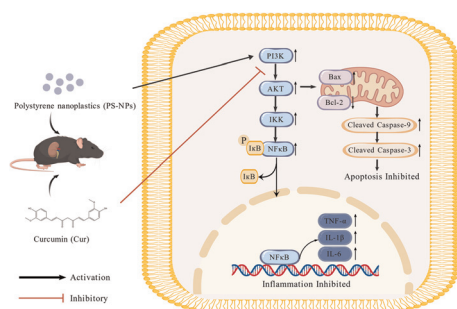
4506

Human milk oligosaccharides shape small intestinal microbiota and epithelial transcriptional profile during early life in mice

Zhongxin Li, Yuxi Shen, Wen Wang, Zhuqing Xie, Qiang Huang and Bin Zhang*



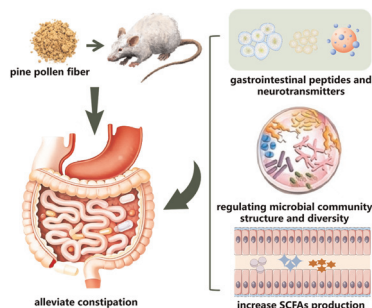
4521



Curcumin attenuates nanoparticle-induced renal injury via the PI3K/AKT signaling pathway

Huiyuan Rui, Xinran Xu, Shuhui Liu, Xueli Gao, Xiaowen Jiang* and Wenhui Yu*

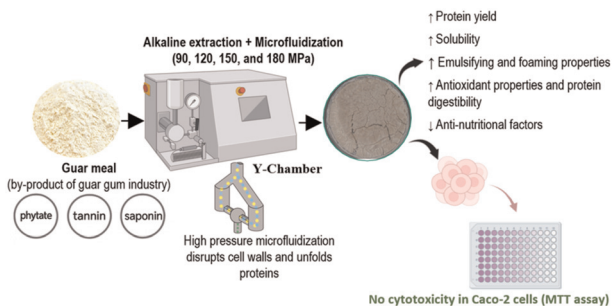
4535



Pine pollen fiber alleviates constipation induced by loperamide in mice: focus on gastrointestinal motility-related hormones, short-chain fatty acids, and gut microbiota changes

Zhiwei Li, Yong Cheng, Dandan Ma, Liduan Yin, Tong Wang, Zhaojun Wang, Qiuming Chen, Maomao Zeng, Jie Chen, Benu Adhikari, Zongping Zheng* and Zhiyong He*

4549



Microfluidization-assisted extraction enhances the functionality and *in vitro* bioactivity of a guar meal-derived protein isolate: a sustainable approach

Geetarani Liklam Loushigam, Keyur Saliya and Prarabdh C. Badgujar*

4567

Samples	0% TA	0.1% TA	0.2% TA	0.3% TA	0.4% TA	6%RRTG	12%RRTG
Not applied							
Applied							

Fabrication of water-in-oil high internal phase emulsions containing astringent compounds for enhanced oral sensation

Haowen Sun, Xinying Wang, Jingjing Yu, Honggao Xu and Like Mao*

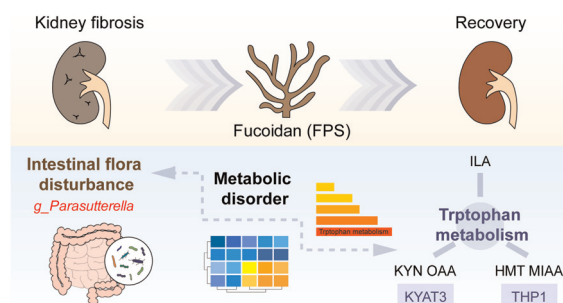


PAPERS

4579

Fucoidan alleviates kidney fibrosis by shaping the gut microbiota and modulating tryptophan metabolism

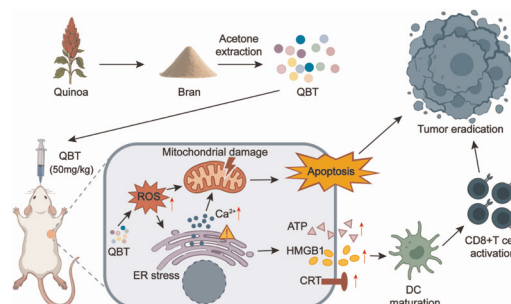
Ying Zhang, Jinxin Li, Wanting Chen, Fengxia Qin, Yuan Tian, Zunjian Zhang, Fengguo Xu* and Pei Zhang*



4591

Triterpenoids from quinoa bran exert anti-colorectal cancer effects via oxidative stress-mediated apoptosis and immune reactivation

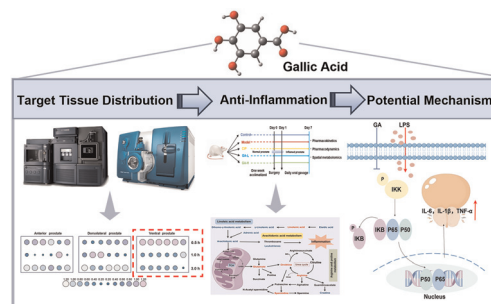
Meng Zhou, Huiqin Guo, Jin'e Du, Tian Xiao, Haili Wu* and Zhuoyu Li*



4607

Anti-inflammatory effects of gallic acid on chronic bacterial prostatitis: involving target tissue distribution

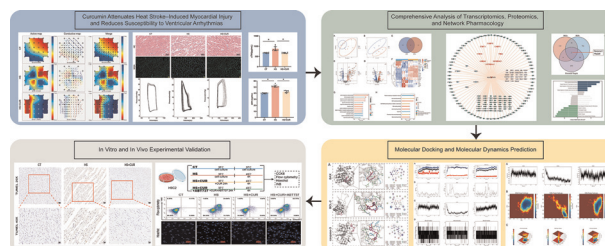
Xiaomei Liu, Shengjie Kong, Qian Yang, Luyao Ma, Xurui Zuo, Xinyue Liu, Ziqiang Li, Chunxiao Lv* and Yuhong Huang*



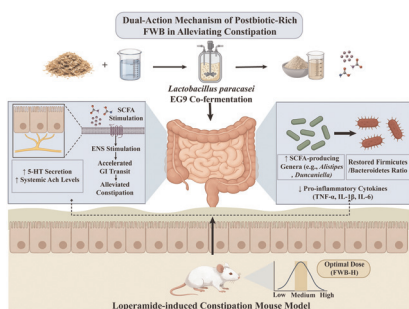
4617

Curcumin attenuates heatstroke-induced myocardial injury and ventricular arrhythmias by regulating the BAX/BCL-2/caspase-3 pathway

Shijie Shao, Baopeng Tang, Junqing Liang, Xiaoyan Wang, Chenxi Xu, Manzeremu Rejiepu, Yali Guo, Limei Wen* and Ling Zhang*



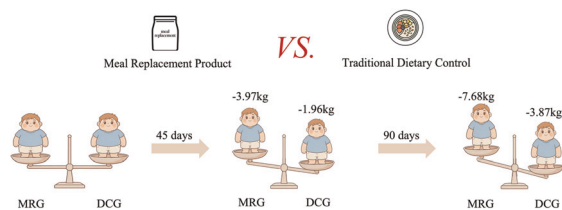
4639



Study on the preparation of postbiotic elements by fermentation of wheat by-products and their role in improving constipation

Jingyang Cai, Jiaqi Wang, Han Li, Aimei Liao, Yinchen Hou, Jihong Huang and Long Pan*

4656



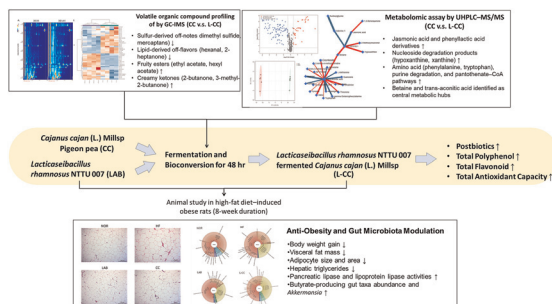
Findings

- After 90 days of intervention, both the meal replacement group (MRG) and dietary control group (DCG) showed significant improvements in weight, BMI, body fat percentage and other metabolic indicators.
- The meal replacement group showed significant superiority in these indicators compared to the dietary control group.

Differences in the effects of meal replacement products and traditional dietary control on weight control in obese adults: a 90-day randomized controlled trial

Qiang Hu, Yuyang Wang, Jiamin Jiang, Biandi Li, Botian Chen and Defu Ma*

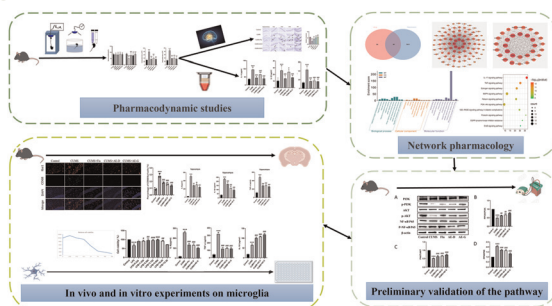
4664



Metabolomic remodeling of pigeon pea by *Lactobacillus rhamnosus* NTU 007 reveals anti-obesity effects in high-fat diet rats

Chin-Feng Liu, Chia-Fang Ao, An-Chi Li and Chun-Lin Lee*

4684



Aloe-emodin alleviates CUMS-induced depressive-like behavior in male C57BL/6 mice via neuroinflammation

Meijia Shan, Sihan Zhang, Shiyun Chen, Shuaimin Jiang, Mengfei Wang, Ruoyun Wu, Yujia Wang, Fuqin Yang, Wei Li* and Wen Li*

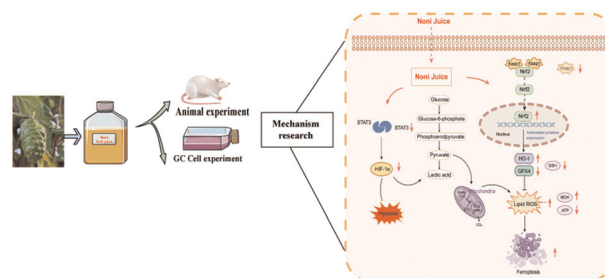


PAPERS

4699

Noni (*Morinda citrifolia* L.) fruit juice induces ferroptosis in gastric cancer cells *via* the Nrf2/HO-1–GPX4 axis

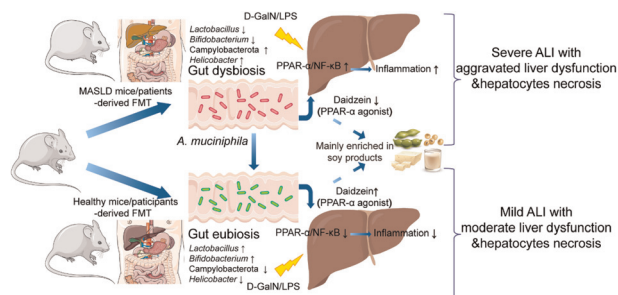
Zhihao Xie,* Hejiao Li, Weifeng Lu,* Lijie Liu, Dianxiao Liao, Chunmeng Mai, Xian Fu, Minni Zhang, Xiuying Tian, Xinbao Hao* and Lu Xu*



4717

Akkermansia muciniphila ameliorates acute liver injury aggravated by MASLD-associated dysbiosis *via* daidzein/PPAR- α /NF- κ B signaling

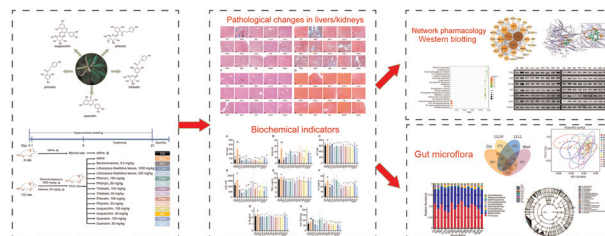
Ziyuan Zhou, Xiaxia Pan, Jiali Ni, Zhuoqi Lou, Yangfan Shen, Shiman Jiang, Xiangmin Dong, Fengjiao Wang, Yanfei Chen and Lanjuan Li*



4729

Lithocarpus litseifolius leaf extract and its flavonoids alleviate hyperuricemia *via* TLR2/PI3K/NF- κ B pathway inhibition and gut microbiota modulation

Shaoyi Cai, Yuanyuan Chen, Tao Luo, Guangqiang Ma, Yu Zhong, Ailan Wu, Shuhong Peng, Chengdong Liao, Hua Zhang,* Changhua Zhang* and Lan Cao*



CORRECTION

4747

Correction: *Citrus unshiu* fermented vinegar and *Hovenia dulcis* fruit extract formulation enhances alcohol metabolism and attenuates alcohol-induced hepatic injury

Wool Lim Park, Hye Ji Min, Hyun Dong Cho, Ji An Heo, Hwi Gon Kim and Kwon-Il Seo*

