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Food & Function

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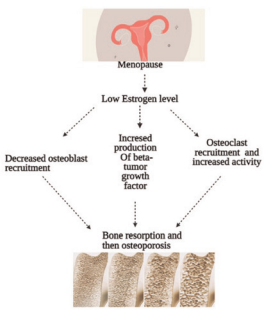
A comprehensive review of the bioactive components of sesame seeds and their impact on bone health issues in postmenopausal women

Ammara Arooj, Roshina Rabail, Muhammad Naeem,* Gulden Goksen, Baojun Xu* and Rana Muhammad Aadil*



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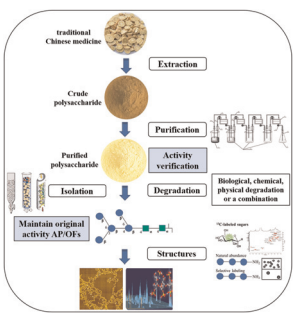
Structure–effect relationship studies of polysaccharides based on receptor–active centres: an alternative view

Wenjin Zhang,* Xiaojia Zhang, Qiuxian Bai, Le Liang, Sheng Wang and Lanping Guo*



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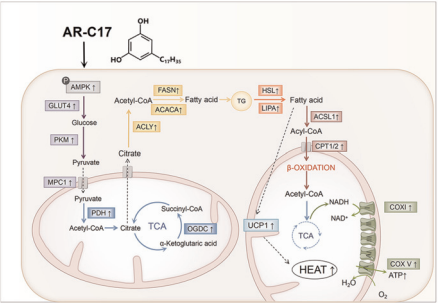
5-Heptadecylresorcinol alleviated high-fat diet induced obesity and insulin resistance by activating brown adipose tissue

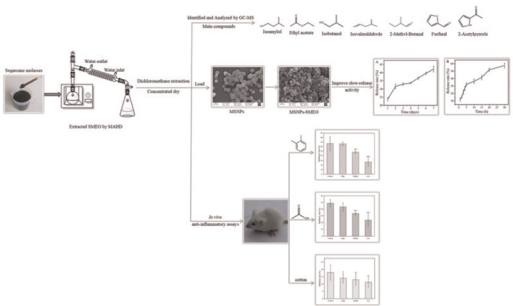
Zihui Yang, Siqi Yang, Ziyuan Wang, Yiming Hao, Zongwei Wang, Yulong Wei, Gaoqi Ye, Jie Liu* and Jing Wang*



5012

Sugarcane molasses essential oils: mesoporous silica nanoparticles as carriers to improve their slow-release activity and the study on their anti-inflammatory activities *in vivo*

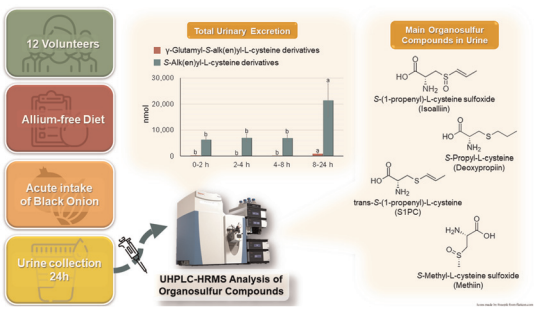
Fengyu Jiang, Weiming Chen, Kai Zhang, Mengmiao Mo, Zhendong Ding, Yongguang Bi and Fansheng Kong*



5023

Urinary excretion of organosulfur compounds after acute ingestion of black onion

Alicia Moreno-Ortega,* Iziar A. Ludwig, María-José Motilva, José Manuel Moreno-Rojas and Gema Pereira-Caro*



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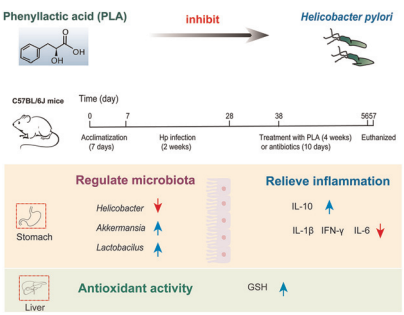
Phenyl lactic acid alleviates *Helicobacter pylori* infection in C57BL/6 mice

Shiying Wu, Wanxin Cui, Qingqing Zhou, Ying Liang, Danli Wu, Yang Xu, Ping Li* and Qing Gu*



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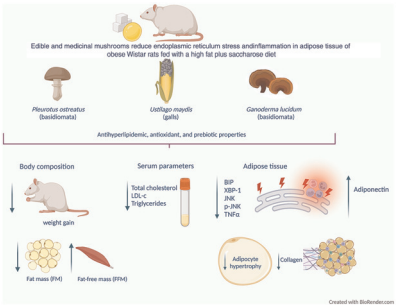

Edible and medicinal mushrooms (*Pleurotus ostreatus*, *Ustilago maydis*, *Ganoderma lucidum*) reduce endoplasmic reticulum stress and inflammation in adipose tissue of obese Wistar rats fed with a high fat plus saccharose diet

Laura González-Ibáñez, María E. Meneses,* Mónica Sánchez-Tapia, Daniel Pérez-Luna, Nimbe Torres, Iván Torre-Villalvazo, Myrna Bonilla, Beatriz Petlacalco, Ivan Castillo, Adriana López-Barradas, Antonio Macías, Armando R. Tovar and Daniel Martínez-Carrera

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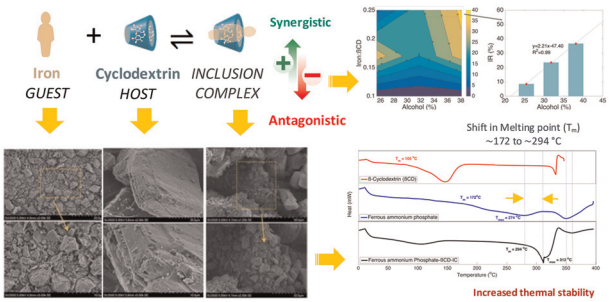

Preparation and characterization of an iron–β-cyclodextrin inclusion complex: factors influencing the host–guest interaction

Shima Saffarionpour* and Levente L. Diosady

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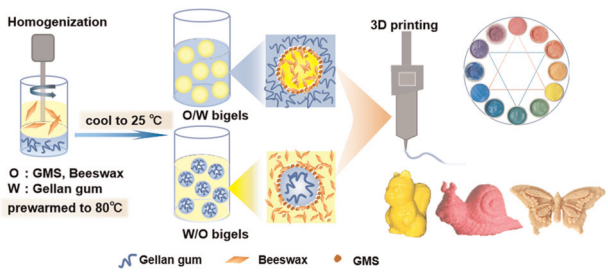

Bigels constructed from hybrid gelator systems: bulk phase-interface stability and 3D printing

Zhixiu Guo, Zhujian Chen and Zong Meng*

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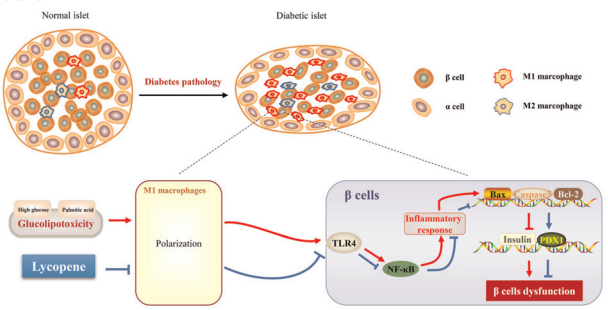

Lycopene ameliorates islet function and down-regulates the TLR4/MyD88/NF-κB pathway in diabetic mice and Min6 cells

Yage Liu, Yimiao Tian, Xuan Dai, Tianyuan Liu, Yueyi Zhang, Shan Wang, Hanfen Shi, Jiyuan Yin, Tianshu Xu, Ruyuan Zhu, Yanfei Zhang, Dandan Zhao, Sihua Gao, Xiang-Dong Wang, Lili Wang* and Dongwei Zhang*

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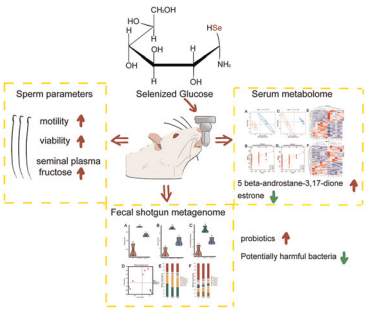
Selenized glucose improves rat semen quality by improving the gut microbiota and serum metabolome

Huimin Sun, Bo Lv, Haiqin Zhu, Zhi Zeng, Saeed El-Ashram, Jinjin Li, Yinying Chao, Juan Wang* and Zhi Wang*



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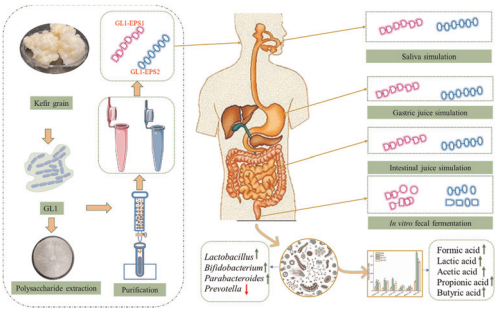
***In vitro* simulated digestion and fecal fermentation of exopolysaccharides from *Lacticaseibacillus paracasei* GL1**

Xiaomeng Wang, Juanjuan Tian, Nanyu Tang, Xueliang Zhang, Luyao Xiao, Mengjia Xu, Mingsheng Dong and Wei Li*



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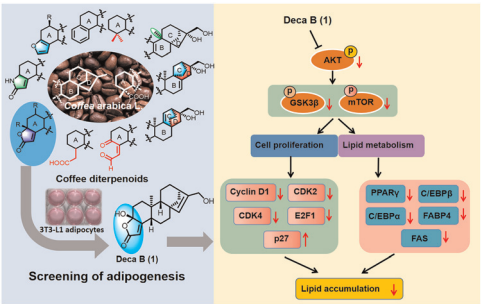
Identification and screening of novel diterpenoids from roasted arabica coffee in the regulation of lipid content in white adipocytes

Qian Wang, Guilin Hu, Qian Lu, Defu Hong, Abdulbaset Al-Romaima, Minghua Qiu* and Wenyong Xiong*



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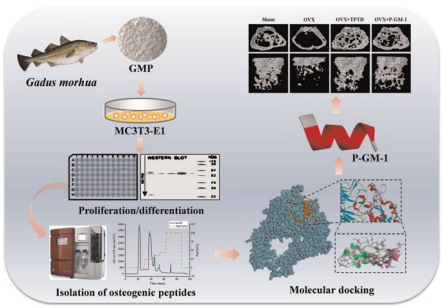
Myosin heavy chain-derived peptide of *Gadus morhua* promotes proliferation and differentiation in osteoblasts and bone formation and maintains bone homeostasis in ovariectomized mice

Meilian Yang, Shuzhen Cheng, Wuchao Ma, Di Wu, Hesham R. El-Seedi, Zhenyu Wang and Ming Du*



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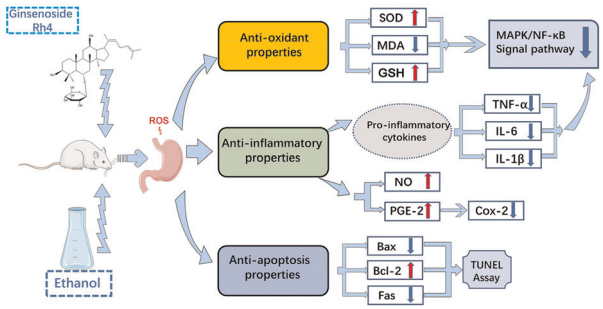

Gastroprotective effects of ginsenoside Rh4 against ethanol-induced gastric mucosal injury by inhibiting the MAPK/NF-κB signaling pathway

Yuqing Wu, Zhiguang Duan, Linlin Qu, Yi Zhang, Chenhui Zhu and Daidi Fan*

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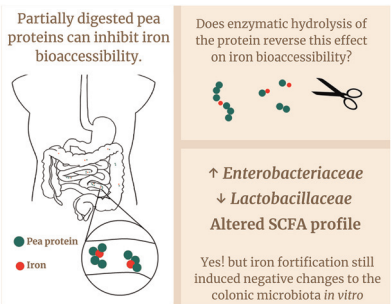

Hydrolysis of pea protein differentially modulates its effect on iron bioaccessibility, sulfur availability, composition and activity of gut microbial communities *in vitro*

Yianna Y. Zhang, Regine Stockmann, Ken Ng and Said Ajlouni*

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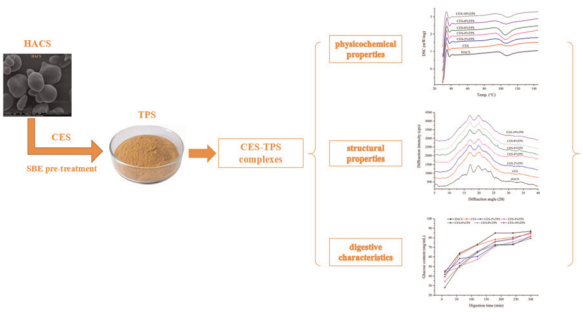

Effect of tea polyphenols on the physicochemical, structural and digestive properties of modified high amylose corn starch

Di Zhao, Kangyi Zhang,* Dongxu Guo and Xiaofeng Tong

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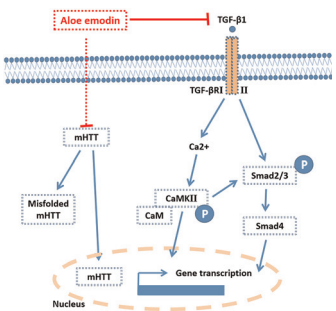

Neuroprotective effect of aloe emodin against Huntington's disease-like symptoms in R6/1 transgenic mice

Nan Yan, Shuai Wang, Haotian Gao, Jiaqi Chen, Jiahui Cao, Pengsheng Wei, Xue Li, Ying Yu, Yan Wang, Yalin Niu, Yijie Wang, Shuyuan Liu* and Ge Jin*

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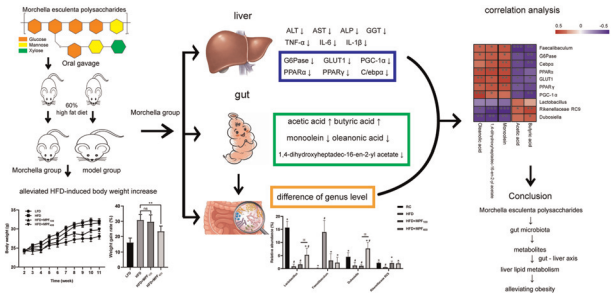
Effect of water-soluble polysaccharides from *Morchella esculenta* on high-fat diet-induced obese mice: changes in gut microbiota and metabolic functions

Bingshu Liu, Leilei Yu,* Qixiao Zhai, Miaoyu Li, Liuruolan Li, Fengwei Tian* and Wei Chen



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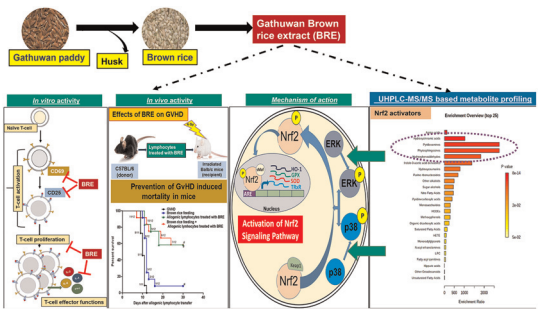
Indian traditional rice variety "Gathuwan" suppresses T-cell-mediated immune responses *via* activation of ERK/Nrf2/HO-1 signalling pathway

Anjali Chauhan, Rahul Checker,* Sunil Nair, Parmeshwar K. Sahu, Deepak Sharma,* Deepak Sharma and Bikram K. Das



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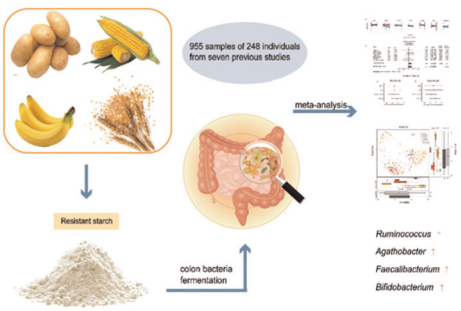
Meta-analysis reveals gut microbiome and functional pathway alterations in response to resistant starch

Ruimin Chen, Chengcheng Zhang, Fusheng Xu, Leilei Yu, Fengwei Tian, Wei Chen and Qixiao Zhai*



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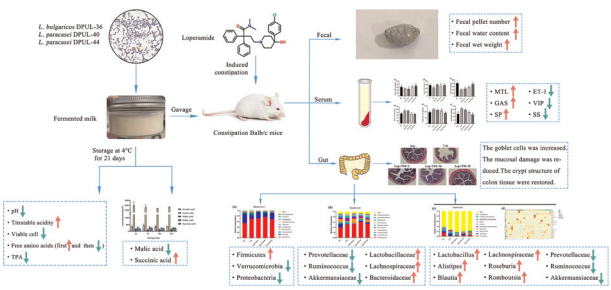
Milk fermented by combined starter cultures comprising three *Lactobacillus* strains exerts an alleviating effect on loperamide-induced constipation in BALB/c mice

Jiang Yu, Hua Guo, Mengying Sun, Chuqi Jiang, Shilong Jiang, Guangqing Mu, Yanfeng Tuo* and Peng Gao



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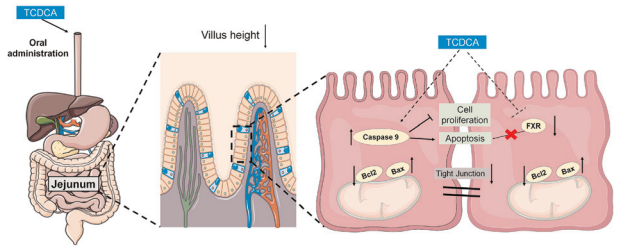

Taurochenodeoxycholic acid inhibits intestinal epithelial cell proliferation and induces apoptosis independent of the farnesoid X receptor

Yichun Liu, Kaimin Niu, Ruxia Wang, Xiaoxiao Liang, Chong Lin, Xin Wu and Zhenya Zhai*

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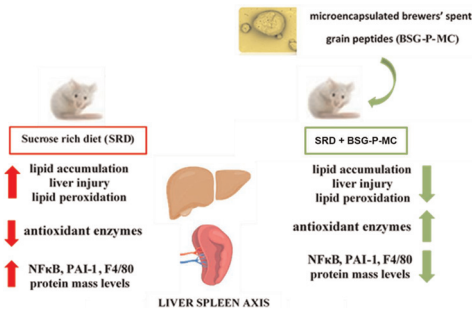
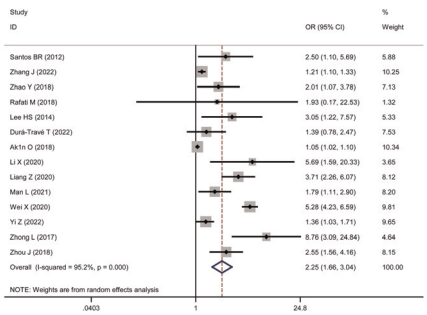


In vivo and *in silico* study of antioxidant and anti-inflammatory effects on the liver-spleen axis of microencapsulated brewers' spent grain peptides

María E. Oliva, Raúl E. Cian, María del Rosario Ferreira, Antonela G. Garzón, Silvina R. Drago and María E. D'Alessandro*

5301



Does vitamin D have a potential role in precocious puberty? A meta-analysis

Caihong Wu, Xingwei Zhang, Feifei Yan, Yani Cui, Yuan Song, Shoumeng Yan* and Weiwei Cui*

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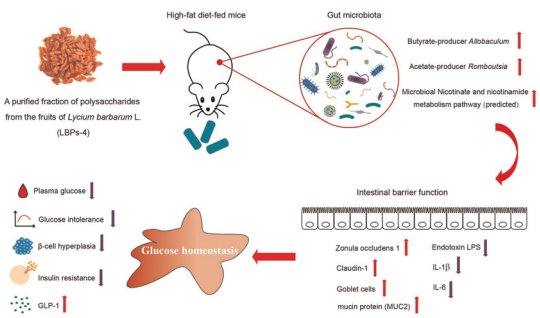

A purified fraction of polysaccharides from the fruits of *Lycium barbarum* L. improves glucose homeostasis and intestinal barrier function in high-fat diet-fed mice

Wangting Zhou, Peiyun Liu, Weiqi Xu, Linwu Ran, Yamei Yan, Lu Lu, Xiaoxiong Zeng,* Youlong Cao* and Jia Mi*

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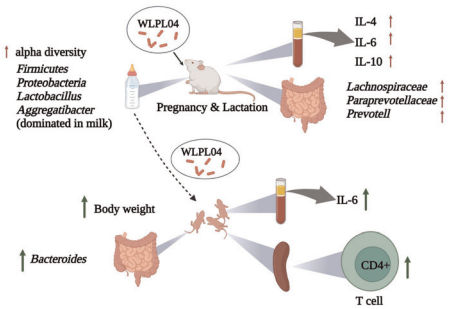
Maternal supplementation with human milk-derived *Lactiplantibacillus plantarum* WLPL04 affects the immunity and gut microbiota of offspring rats

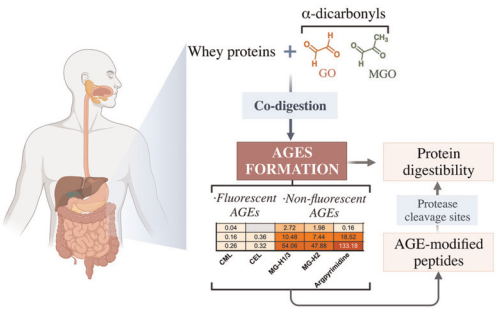
Changcheng Zhong, Qianhui Wang, Yao He, Xiangxiang Zhao, Yanghong Wang, Lihua He, Hua Wei and Xueying Tao*



5342

Parallel generation of extra advanced glycation end-products during co-digestion of whey proteins and α-dicarbonyls in a simulated gastrointestinal model

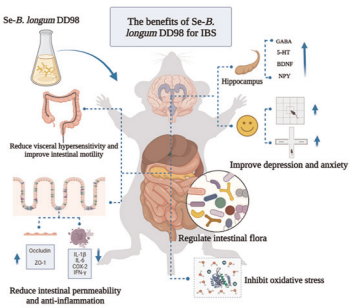
Qiaozhi Zhang, Yuhao Jiang, Huatao Li, Zhongshan Gao, Gang Yu, Hujun Xie, Yanbo Wang and Linglin Fu*



5355

Selenium-enriched *Bifidobacterium longum* DD98 relieves irritable bowel syndrome induced by chronic unpredictable mild stress in mice

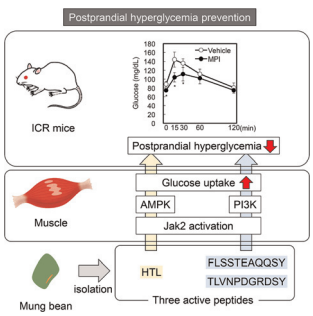
Xueli Jin, Yongjia Hu, Ting Lin, Fei Gao, Ziqi Xu, Xiao Hou, Yu Yin, Shidong Kan, Hui Zhu* and Daijie Chen*



5375

Mung bean peptides promote glucose uptake *via* Jak2 activation in L6 myotubes

Yasukiyo Yoshioka, Qing Zhang, Xin Wang, Tomoya Kitakaze, Yoko Yamashita, Mitsutaka Kohno and Hitoshi Ashida*



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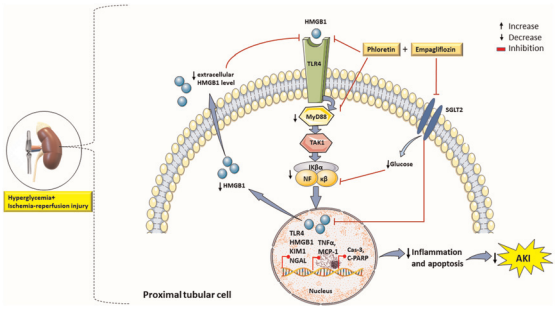
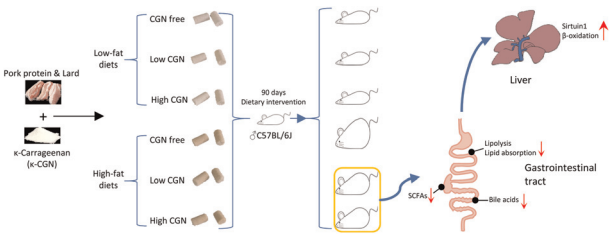
5391



Concomitant inhibition of TLR-4 and SGLT2 by phloretin and empagliflozin prevents diabetes-associated ischemic acute kidney injury

Vishwadeep Shelke, Ajinath Kale, Neha Dagar, Tahib Habshi and Anil Bhanudas Gaikwad*

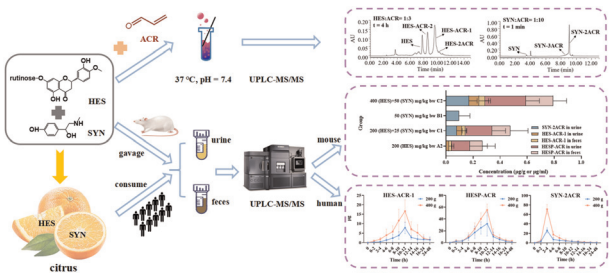
5404



Carrageenan in meat: improvement in lipid metabolism due to Sirtuin1-mediated fatty acid oxidation and inhibited lipid bioavailability

Zhiji Huang, Yafang Ma, Yunting Xie, Di Zhao and Chunbao Li*

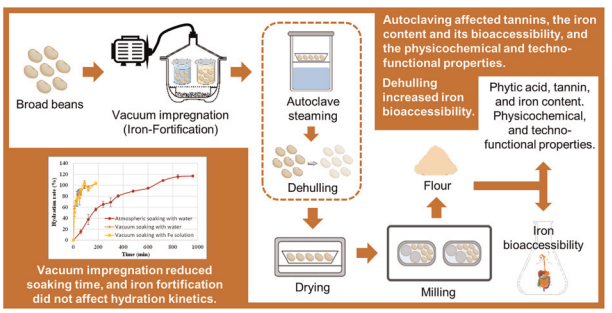
5417



Effects of hesperidin combined with synephrine on the capture of acrolein in a mouse model, or in humans by citrus consumption

Mengwei Jia, Huihui Gu, Yongling Lu and Lishuang Lv*

5429



Vacuum impregnation as a sustainable technology to obtain iron-fortified broad bean (*Vicia faba*) flours

Milagros Arnal, Marta Gallego, Leticia Mora and Pau Talens*

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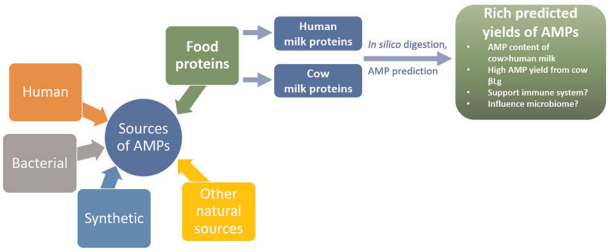
5442

Comparative yields of antimicrobial peptides released from human and cow milk proteins under infant digestion conditions predicted by *in silico* methodology

Feijie Li, Pauline Dhordain, Milton T.W. Hearn, Lisandra L. Martin and Louise E. Bennett*



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