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Food & Function

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IN THIS ISSUE

ISSN 2042-650X CODEN FFOUAI 15(5) 2331–2776 (2024)

Cover
See Deirdre Mikkelsen *et al.*, pp. 2406–2421.

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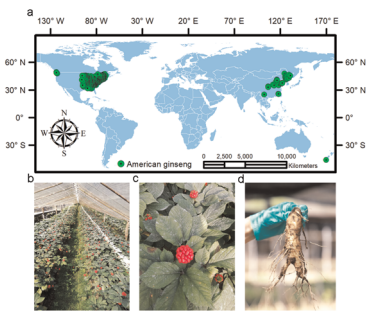
REVIEWS

2343

A systematic review of ginsenoside biosynthesis, spatiotemporal distribution, and response to biotic and abiotic factors in American ginseng

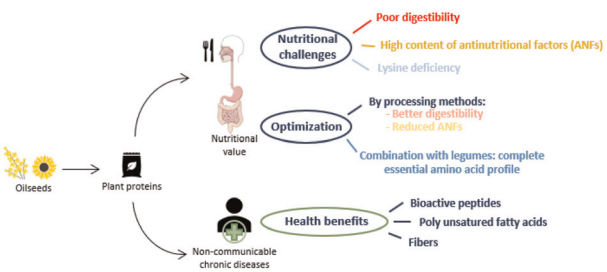
Lixia Tian, Ranran Gao, Yuxiang Cai, Junxian Chen, Hongmei Dong, Shanshan Chen, Zaichang Yang, Yu Wang,* Linfang Huang* and Zhichao Xu*



2366

Are oilseeds a new alternative protein source for human nutrition?

Lina Toutirais,* Stephane Walrand and Carole Vaysse



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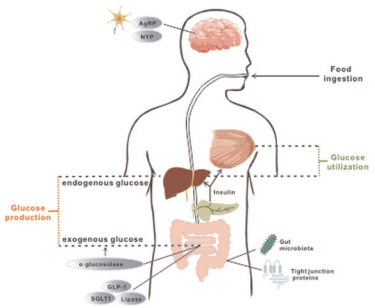
REVIEWS

2381

Hypoglycemic effects and associated mechanisms of resveratrol and related stilbenes in diet

Jie Peng, Chenyang Lu, Yue Luo, Xiurong Su, Shiming Li* and Chi-Tang Ho*

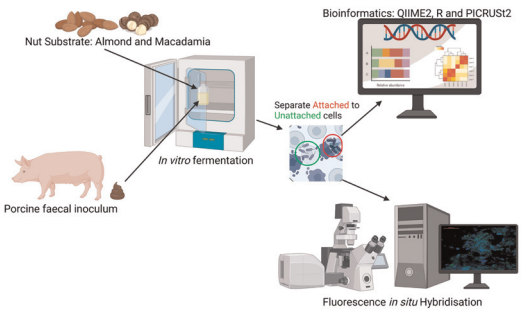


PAPERS

2406

Biomass attachment and microbiota shifts during porcine faecal *in vitro* fermentation of almond and macadamia nuts differing in particle sizes

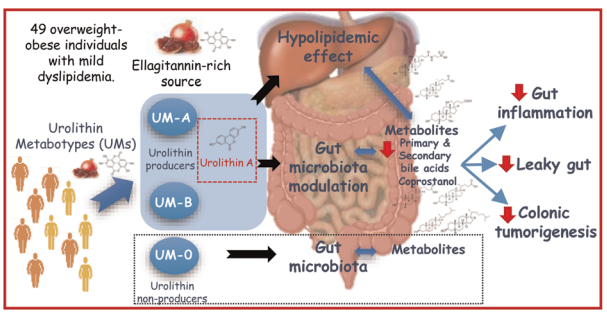
Cindy Bermudez, Hong Yao, Widaningrum, Barbara A. Williams, Bernadine M. Flanagan, Michael J. Gidley and Deirdre Mikkelsen*



2422

Urolithin A production drives the effects of pomegranate on the gut microbial metabolism of bile acids and cholesterol in mild dyslipidaemic overweight and obese individuals

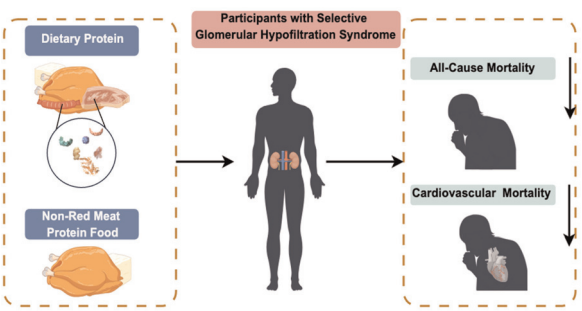
Adrián Cortés-Martín, Carlos E. Iglesias-Aguirre, Alicia Marín, María Romo-Vaquero, Fernando Vallejo, Juan Carlos Espín and María Victoria Selma*



2433

Association between adequate dietary protein and all-cause and cardiovascular mortality in patients with selective glomerular hypofiltration syndrome

Ruming Shen, Zhongjiao Xu, Li Lin, Jiayi Shen, Wuming Hu, Lingchun Lv* and Tiemin Wei*



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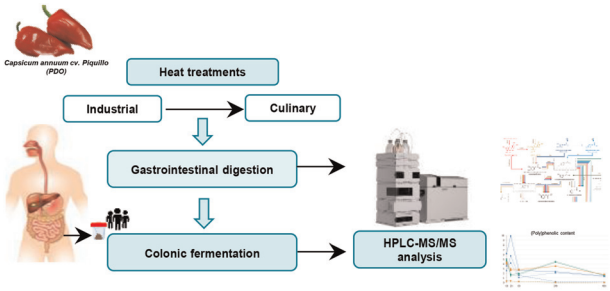
PAPERS

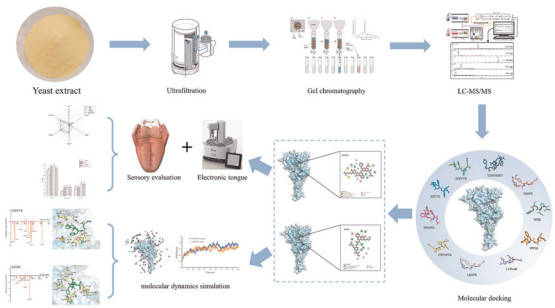
2443



Industrial and culinary treatments applied to Piquillo pepper (*Capsicum annuum cv. Piquillo*) impact positively on (poly)phenols' bioaccessibility and gut microbiota catabolism

Cristina Del Burgo-Gutiérrez, Iziar A. Ludwig,* María-Paz De Peña and Concepción Cid

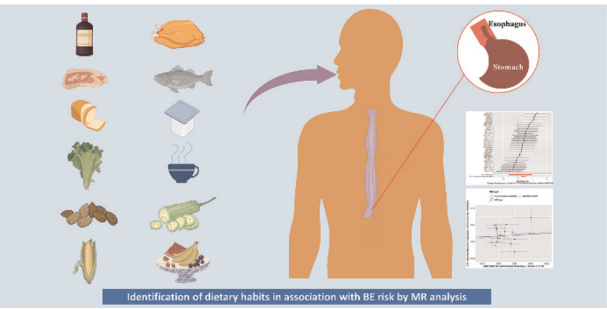
2459



Novel kokumi peptides from yeast extract and their taste mechanism *via* an *in silico* study

Haofeng Lao, Jincui Chang, Haining Zhuang, Shiqing Song, Min Sun, Lingyun Yao, Huatian Wang, Qian Liu, Jian Xiong, Pei Li, Chuang Yu* and Tao Feng*

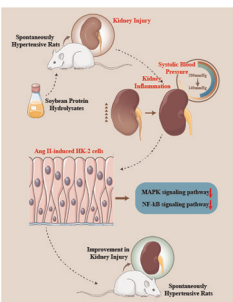
2474



Causal relationships between dietary habits and Barrett's esophagus risk: a univariable and multivariable Mendelian randomization study

Zhen Junhai, Zeng Suqi, Deng Beiying, Tan Zongbiao, Liu Chuan, Wu Yanrui and Dong Weiguo*

2485



Soybean-derived antihypertensive hydrolysates attenuate Ang II-induced renal damage by modulating MAPK and NF-κB signaling pathways

Tianyuan Song, Yin-Yi Ding, Tiantian Zhang, Qiaolin Cai, Yonghong Hu, Qing Gu and Zhenyu Gu*

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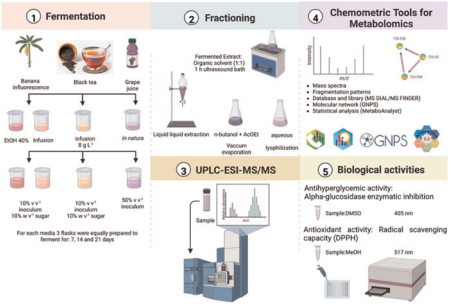
PAPERS

2497

Unveiling chemical responses in the kombucha-based fermentation of black tea, banana flower, and grape juice: LC-ESIMS, GNPS, MS-DIAL, and MS-FINDER-assisted chemical characterization

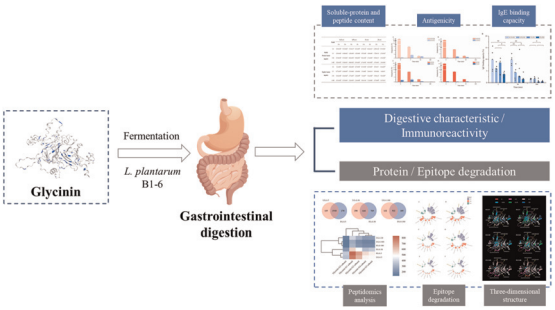
Geovanna de Oliveira Costa, Carime L. Mansur Pontes, Alexandre L. Parize and Louis P. Sandjo*



2524

Lactic acid bacteria modulate the gastrointestinal digestive behavior of soy glycinin and correlation with its immunoreactivity: a peptidomic study

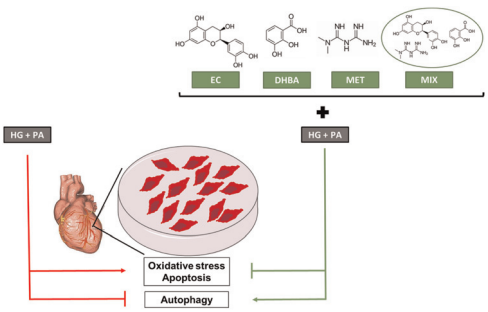
Zhen Liu, Yumeng Fu, Elham Azarpazhooh, Marjan Ajami, Wei Li and Xin Rui*



2536

(−)-Epicatechin and colonic metabolite 2,3-dihydroxybenzoic acid, alone or in combination with metformin, protect cardiomyocytes from high glucose/high palmitic acid-induced damage by regulating redox status, apoptosis and autophagy

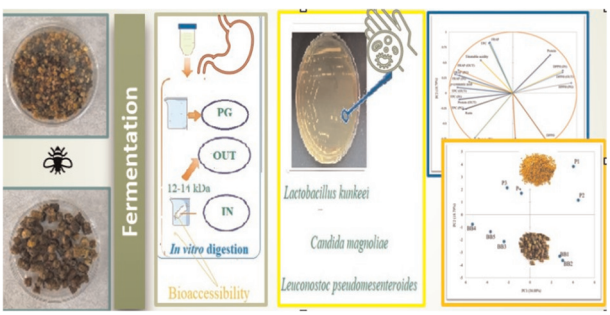
Esther García-Díez, Jara Pérez-Jiménez, María Ángeles Martín and Sonia Ramos*



2550

The process of pollen transformation into bee bread: changes in bioactivity, bioaccessibility, and microbial dynamics

Atiye Degirmenci, Oktay Yildiz,* Gulsum Merve Boyraci, Mehtap Er Kemal and Omer Simsek



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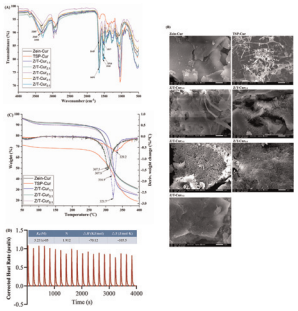
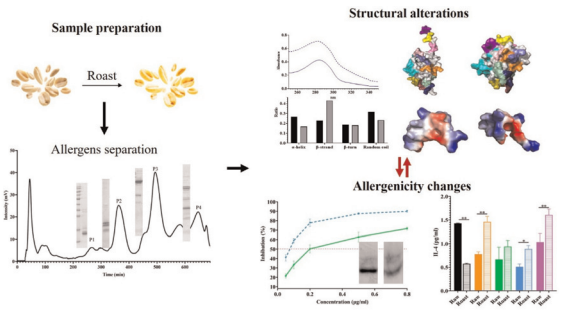
2563



Fabrication of zein–tamarind seed polysaccharide–curcumin nanocomplexes: their characterization and impact on alleviating colitis and gut microbiota dysbiosis in mice

Fan Xie, Zengjin Zhu, Jingyi Zeng, Yongjun Xia, Hui Zhang, Yan Wu, Zibo Song and Lianzhong Ai*

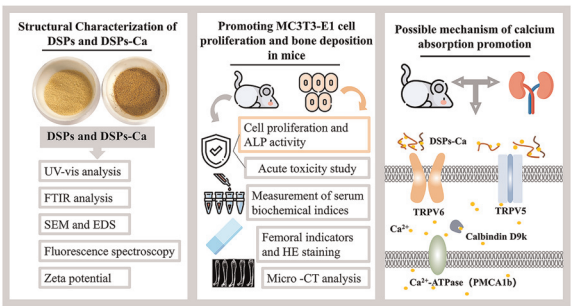
2577



The structure and potential allergenicity of peanut allergen monomers after roasting

Ying Zhang, Qin Geng, Min Song, Xin Li, Anshu Yang, Ping Tong, Zhihua Wu* and Hongbing Chen

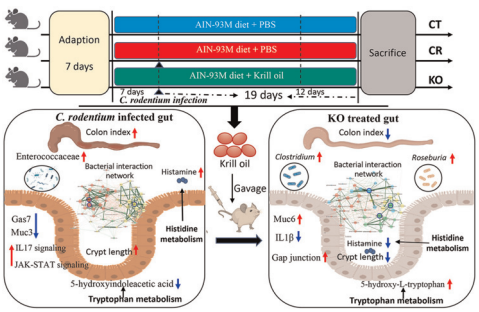
2587



Structural characterisation of deer sinew peptides as calcium carriers, their promotion of MC3T3-E1 cell proliferation and their effect on bone deposition in mice

Li Sun, Jinze Liu, Hongyan Pei, Meiling Shi, Weijia Chen, Ying Zong, Yan Zhao, Jianming Li, Rui Du* and Zhongmei He*

2604



Phospholipid-rich krill oil promotes intestinal health by strengthening beneficial gut microbial interactions in an infectious colitis model

Fang Liu,* Allen D. Smith, Thomas T. Y. Wang, Quynhchi Pham, Pengfen Hou, Lumei Cheung, Haiyan Yang* and Robert W. Li

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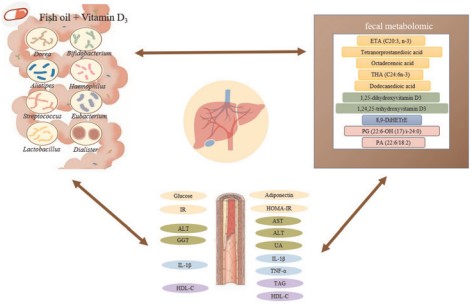
2616

Effects of dietary supplementation of fish oil plus vitamin D_3 on gut microbiota and fecal metabolites, and their correlation with nonalcoholic fatty liver disease risk factors: a randomized controlled trial

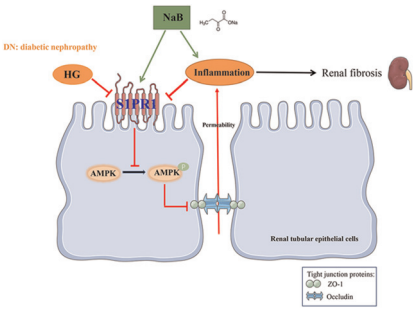
Xueqi Li, Chi Pan, Wenjun Ma, Ting Yang, Chong Wang, Weiwei Han, Wei Zhang, Hui Li, Zhongxia Li, Ting Zhao, Xiao-fei Guo* and Duo Li



2628

Sodium butyrate ameliorated diabetic nephropathy-associated tubulointerstitial inflammation by modulating the tight junctions of renal tubular epithelial cells

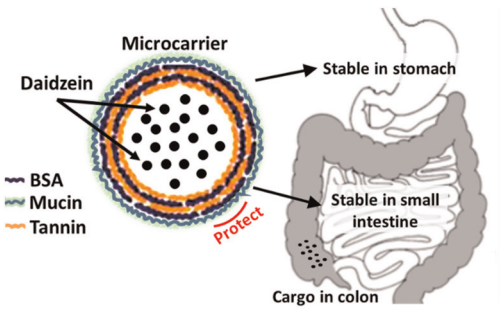
Tingting Yang, Lin Li, Cai Heng, Pian Sha, Yiying Wang, Jiaming Shen, Zhenzhou Jiang, Sitong Qian, Chujing Wei, Hao Yang, Xia Zhu, Tao Wang, Mengying Wu, Jianyun Wang, Qian Lu and Xiaoxing Yin*



2645

Mucin coated protein-polyphenol microcarriers for daidzein delivery

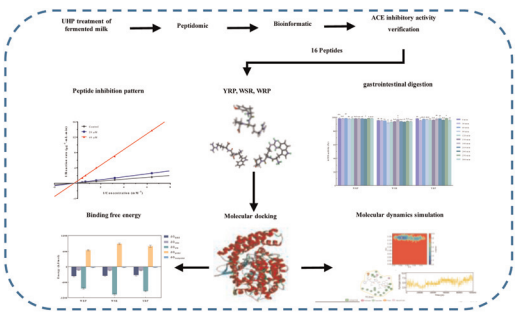
Su Hui Lim,* Germaine Jia Min Yong, Cheryl Yingxue Chia, Shu Mei Man, Gomathy Sandhya Subramanian, Geraldine Oh, Eleanor Jing Yi Cheong and Maxim V. Kiryukhin*



2655

Screening and molecular dynamics simulation of ACE inhibitory tripeptides derived from milk fermented with *Lactobacillus delbrueckii* QS306

Nan Wu, Puyu Li, Quan Shuang* and Wuhanqimuge*



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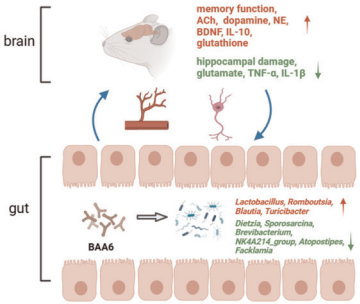
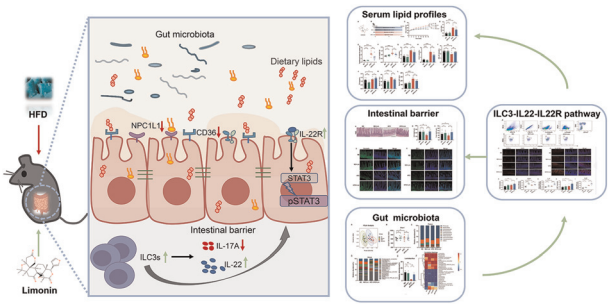


Bifidobacterium animalis subsp. *lactis* A6 attenuates hippocampal damage and memory impairments in an ADHD rat model

Xindi Yin, Weichen Liu, Haihong Feng, Jiaqiang Huang, Qi Wang, Qi Zhang, Jingjing He* and Ran Wang*

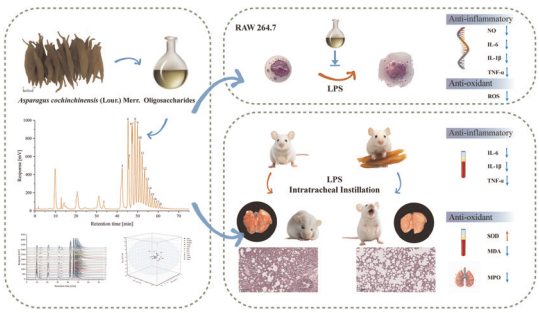
2679



Limonin alleviates high-fat diet-induced dyslipidemia by regulating the intestinal barrier *via* the microbiota-related ILC3–IL22–IL22R pathway

Wangling Wu, Yingying Pan, Tianyan Zheng, Haoyi Sun, Xia Li, Haiyan Zhu, Zheng Wang and Xin Zhou*

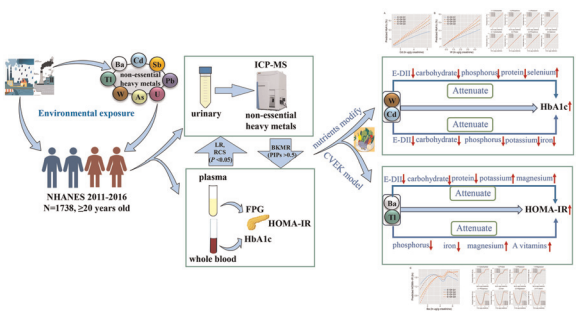
2693



Oligosaccharides from *Asparagus cochinchinensis* for ameliorating LPS-induced acute lung injury in mice

Yajie Ma, Fan Zhang, Yujun Xie, Luyao An, Boli Zhang,* Boyang Yu* and Renshi Li*

2706



Joint associations among non-essential heavy metal mixtures and nutritional factors on glucose metabolism indexes in US adults: evidence from the NHANES 2011–2016

Xiaolang Chen, Peipei Li, Yuanhao Huang, Yingnan Lv, Xia Xu, Huiyun Nong, Lulu Zhang, Huabei Wu, Chao Yu, Lina Chen, Di Liu, Lancheng Wei and Haiying Zhang*

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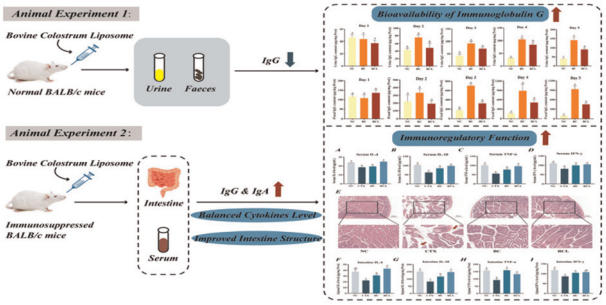
2719

Effect of bovine colostrum liposomes on the bioavailability of immunoglobulin G and their immunoregulatory function in immunosuppressed BALB/c mice

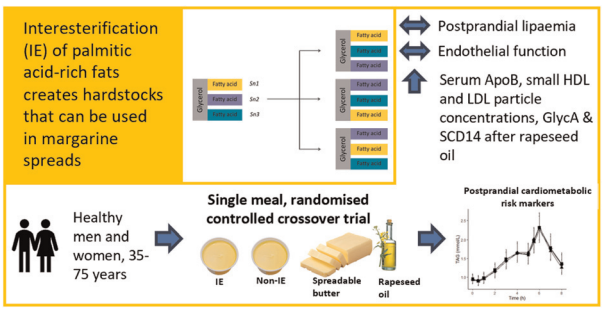
Ze-Qiang Zhou, Mengge Liu, Ze-Yuan Deng and Jing Li*



2733

Postprandial lipid and vascular responses following consumption of a commercially-relevant interesterified palmitic acid-rich spread in comparison to functionally-equivalent non-interesterified spread and spreadable butter: a randomised controlled trial in healthy adults

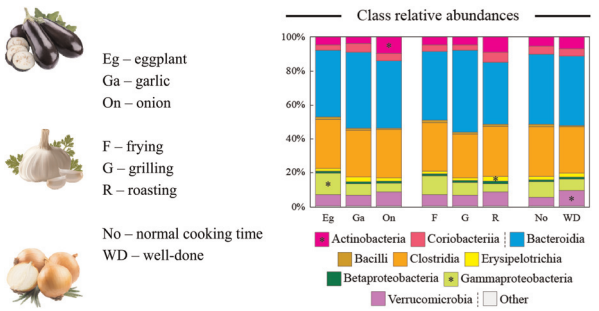
W. L. Hall,* A. Alkoblan, P. S. Gibson, M. D'Annibale, A. Coekaerts, M. Bauer, J. H. Bruce, B. Lecomte, A. Penhoat, F. Laugerette, M.-C. Michalski, L. J. Salt, P. J. Wilde and S. E. Berry



2751

Human gut microbiota fermentation of cooked eggplant, garlic, and onion supports distinct microbial communities

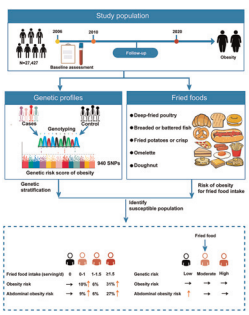
Sumudu Rajakaruna, Sergio Pérez-Burillo, José Ángel Rufián-Henares and Oleg Paliy*



2760

Fried food consumption, genetic risk, and incident obesity: a prospective study

Xuzhi Wan, Yang Ao, Xiaohui Liu, Pan Zhuang, Yingyu Huang, Hongbo Shi, Jingjing Jiao and Yu Zhang*



CORRECTIONS

2772

Removal of Expression of Concern: Sodium butyrate ameliorated diabetic nephropathy-associated tubulointerstitial inflammation by modulating tight junction of renal tubular epithelial cells

Tingting Yang, Lin Lia, Cai Heng, Pian Sha, Yiying Wang, Jiaming Shen, Zhenzhou Jiang, Sitong Qian, Chujing Wei, Hao Yang, Xia Zhu, Tao Wang, Mengying Wu, Jianyun Wang, Qian Lu and Xiaoxing Yin*

2773

Correction: Exploiting *Locusta migratoria* as a source of bioactive peptides with anti-fibrosis properties using an *in silico* approach

Carla S. S. Teixeira, Rita Biltes, Caterina Villa, Sérgio F. Sousa, Joana Costa, Isabel M. P. L. V. O. Ferreira and Isabel Mafra*

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