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Food & Function

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See Emilia Garcia-Moruno, Ana-Belén Blázquez *et al.*, pp. 2656–2668.

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Inside cover
See Liyong Luo, Liang Zeng *et al.*, pp. 2669–2686.

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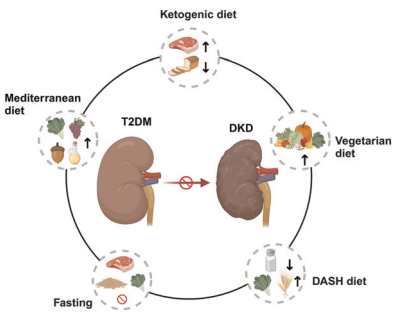
Dietary therapy to halt the progression of diabetes to diabetic kidney disease

Hongtu Hu, Guohua Ding* and Wei Liang*



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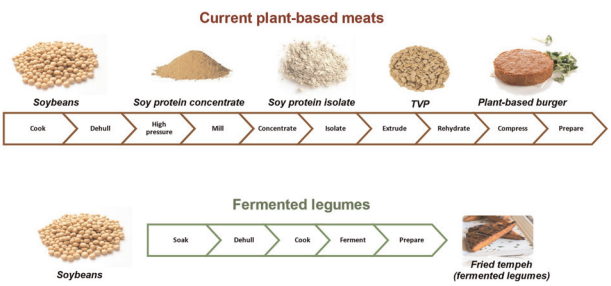
Insights from traditional fermented legumes towards the innovation of modern plant-based meat analogues

Raisa Rudge, Reed A. Nicholson, Colleen Cottrell, Janet Collins, Louwrens C. Hoffman, Jason R. Stokes and Heather E. Smyth*



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PAPERS

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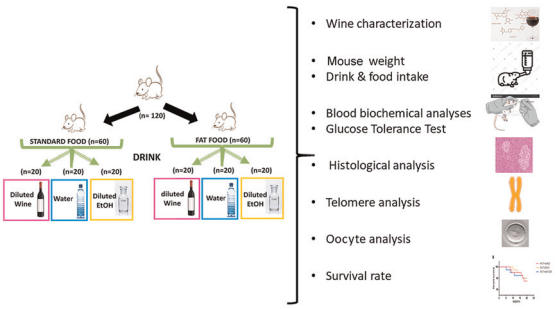
Effect of long-term moderate red wine consumption in CD1 female mice

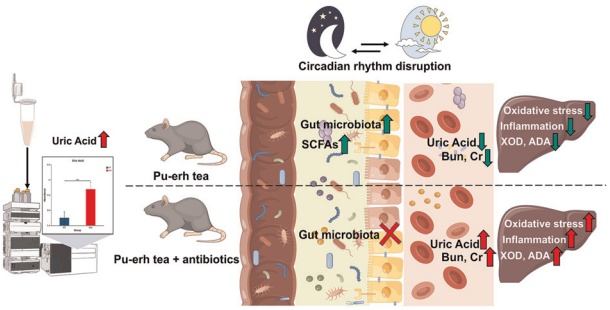
Emilia Garcia-Moruno,* Ana-Belén Blázquez,* Nereida Jiménez de Oya, Ana Esteban, Silvia Motta, Antonella Costantini, Pedro J. Sánchez-Cordón, Eva Pericuesta, Miguel A. Martín-Acebes, Alfonso Gutiérrez-Adán and Juan-Carlos Saiz



2669

Investigating the modulatory effects of Pu-erh tea on the gut microbiota in ameliorating hyperuricemia induced by circadian rhythm disruption

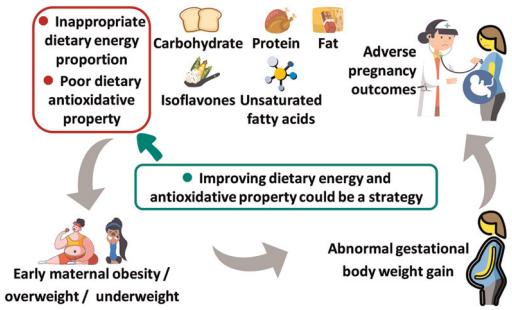
Sibo Zhao, Hongli Cao, Fanwei Sun, Mianhong Xu, Xinghua Wang, Jielin Jiang, Liyong Luo* and Liang Zeng*



2687

Improving dietary energy and antioxidative properties benefit early maternal BMI and further manage adverse pregnancy outcomes with better weight gain

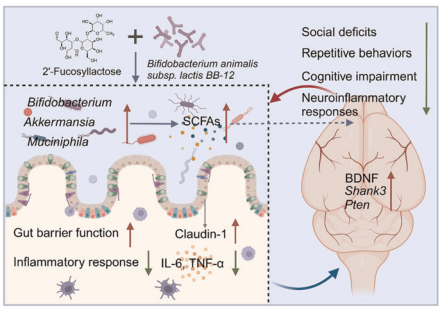
Hang-Yu Li, Bing-Jie Ding,* Jia Wang, Xin-Li Yang, Zhi-Wen Ge, Nan Wang, Ya-Ru Li, Yan-Xia Bi, Cong-Cong Wang, Zheng-Li Shi, Yu-Xia Wang, Yi-Si Wang, Cheng Li, Ze-Bin Peng and Zhong-Xin Hong*



2703

Synbiotic combination of 2′-fucosyllactose and *Bifidobacterium* mitigates neurodevelopmental disorders and ASD-like behaviors induced by valproic acid

Ying He, Bo Zhang, Yu Xin, Wenxiu Wang, Xue Wang, Zhuo Liu, Yongbo She, Rui Guo, Gengjie Jia, Shan Wu and Zhigang Liu*



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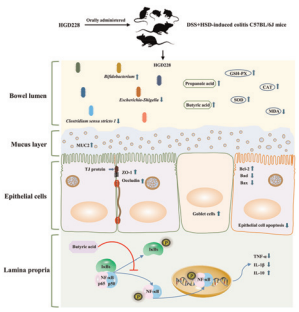
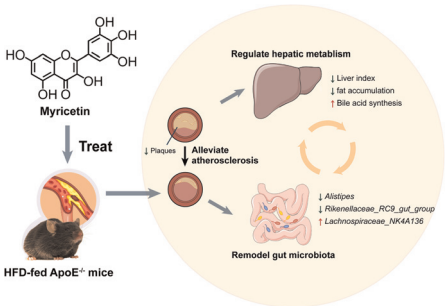
2718



Alleviation effects of *Lactobacillus plantarum* in colitis aggravated by a high-salt diet depend on intestinal barrier protection, NF-κB pathway regulation, and oxidative stress improvement

Yang Chen, Nian Liu, Fangyi Chen, Mengyuan Liu, Yang Mu, Chao Wang, Lusha Xia, Mingye Peng and Mengzhou Zhou*

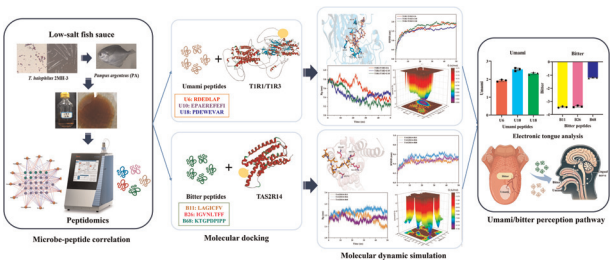
2737



Myricetin alleviates high-fat diet-induced atherosclerosis in ApoE$^{-/-}$ mice by regulating bile acid metabolism involved in gut microbiota remodeling

Yilong Liu, Ruoqi Wang, Jinren Zhou, Qiang Lyu, Xiaoyong Zhao, Xiaochun Yang, Kunsong Chen, Zhiwei Gao* and Xian Li*

2750



New perspectives on the taste mechanisms of umami and bitter peptides in low-salt fermented fish sauce based on peptidomics, molecular docking and molecular dynamics

Jiarun Han, Hangjia Zhang, Qi Wang, Lina Ding, Jiaqi Yin, Jinfeng Wu, Shi Hu, Ping Li and Qing Gu*

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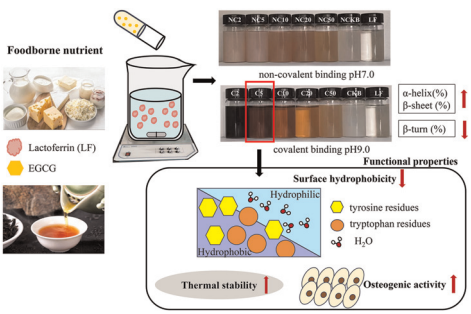

Structural modification of lactoferrin by epigallocatechin gallate: elucidation of its structure and exploration of its potential in promoting osteoblast proliferation

Zhenni Zhai, Xiaoni Lian, Fengjiao Fan,* Peng Li, Jian Ding, Xinyang Sun, Xiaoyi Jiang, Ziqian Li and Yong Fang*

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PAPERS

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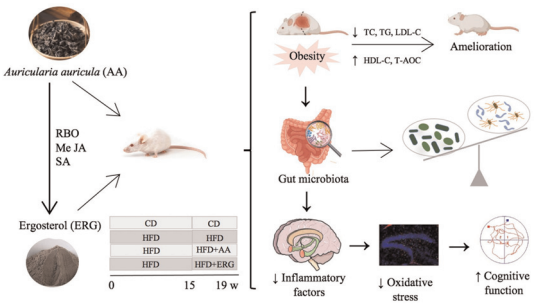
Ergosterol originated from *Auricularia auricula* attenuates high fat diet-induced obesity and cognitive impairment in mice

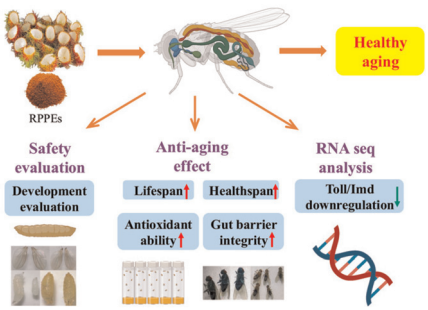
Wei Song,* Lina Zhu, Chunyan Yang, Kaixin Su, Yaxing Miao, Jinhong Hu, Bing Chen, Lingling Li, Xiaole Cui, Yane Luo, Qinglin Sheng and Tianli Yue*



2793

Polyphenol extracts from rambutan peel promote longevity *via* the attenuation of the Toll/Imd pathway

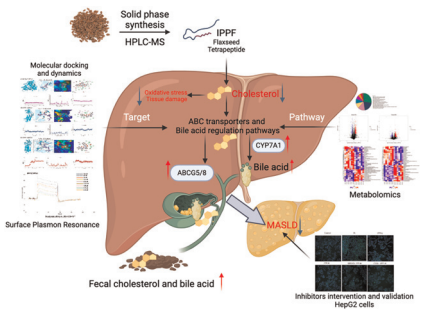
Jian-Cong Huang, Xue-Kun Pan, Shun-Cai Li, Wen-Hui Zeng, Yu-Jie Zhong, Hong-Yu Pan* and Yong-Liang Zhuang*



2808

Flaxseed-derived peptide, Ile-Pro-Pro-Phe (IPPF), ameliorates hepatic cholesterol metabolism to treat metabolic dysfunction-associated steatotic liver disease by promoting cholesterol conversion and excretion

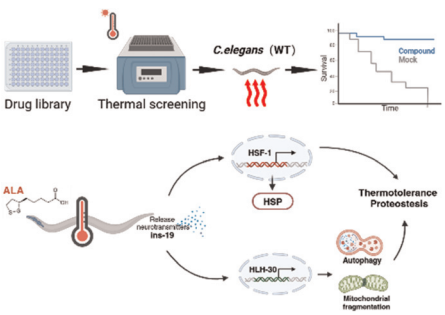
Xingyu Yuan, Yifeng Hou, Narisu Qin, Lu Xiang, Zhe Jiang and Xiaolan Bao*



2824

Dietary alpha-lipoic acid alleviates heat stress by modulating insulin-like signaling to maintain homeostasis *in C. elegans*

Longnong You, Zirui Huang, Wenyuan He, Lizhu Zhang, Haiyang Yu, Yaoyong Zeng, Yan Huang, Shaoxiao Zeng* and Lingjun Zheng*



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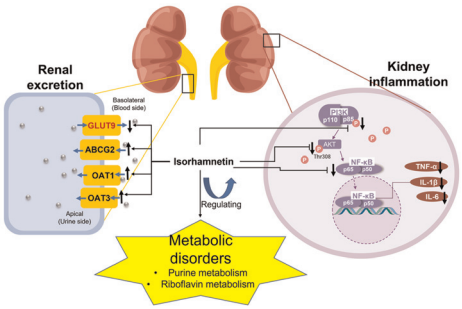
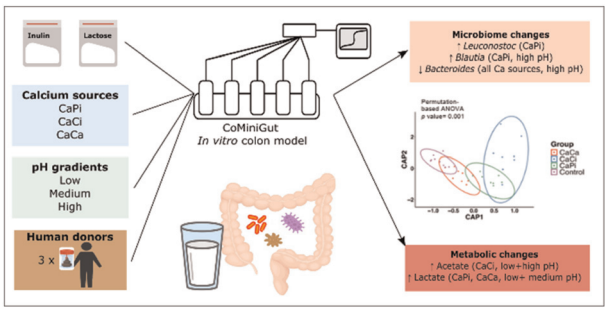


Isorhamnetin ameliorates hyperuricemia by regulating uric acid metabolism and alleviates renal inflammation through the PI3K/AKT/NF-κB signaling pathway

Xiaoran Kong, Li Zhao, He Huang, Qiaozhen Kang, Jike Lu* and Jiaqing Zhu*

2857



Effects of calcium supplementation on the composition and activity of *in vitro* simulated gut microbiome during inulin fermentation

Xiaorui Zhao, Nilay Büdeyri Gökgöz, Zhuqing Xie, Louise M. A. Jakobsen, Dennis Sandris Nielsen and Hanne Christine Bertram*

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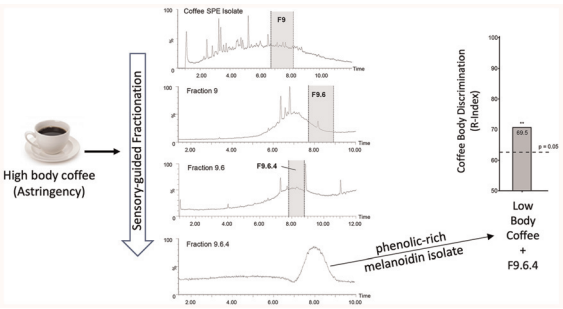

Chemical characterization and sensory evaluation of a phenolic-rich melanoidin isolate contributing to coffee astringency

Brianne M. Linne, Edisson Tello, Christopher T. Simons and Devin G. Peterson*

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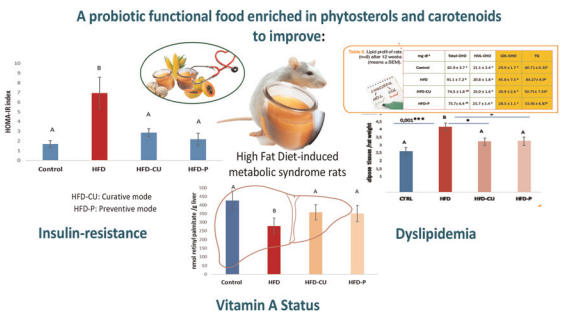

A fermented functional food enriched in phytosterol and carotenoids improves lipid profile and insulin resistance and restores vitamin A status in high-fat diet-induced metabolic syndrome rats

Claudie Dhuique-Mayer,* Salomé Boada, Jean-Christophe Meile, Patrick Poucheret, Jean-François Landrier, Maria Urdaci, Karen Lambert and Adrien Servent

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PAPERS

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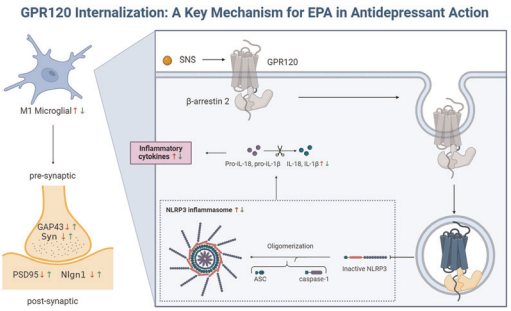
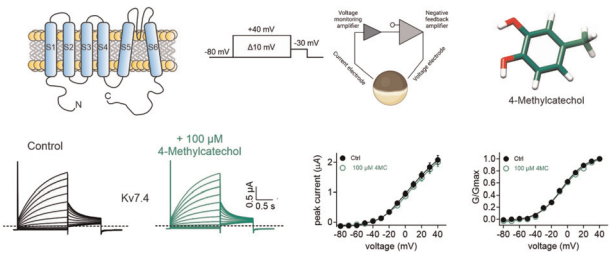
GPR120 internalization: a key mechanism for EPA in antidepressant action

Qingying Yu, Huan Li, Mengxue Chen, Yanan Pan, Liuchang Zhou, Lin An, Jinlan Zhao, Shasha Bai, Qi Liang,* Rong Zhang* and Di Deng*



COMMENT

2909

Comment on "The quercetin metabolite 4-methylcatechol causes vasodilation *via* voltage-gated potassium (Kv) channels" by Patrícia Dias, Rudy Salam, Jana Pourová, Marie Vopršalová, Lukáš Konečný, Eduard Jirkovský, Jurjen Duintjer Tebbens and Přemysl Mladěnka, *Food & Function*, 2024, 15, 11047

Rían W. Manville, Hanh A. Nguyen and Geoffrey W. Abbott*