

Food & Function

rsc.li/food-function

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2042-650X CODEN FFOUAI 16(14) 5655-5952 (2025)



Cover

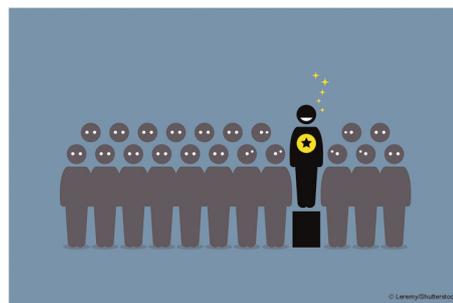
See Huayi Suo, Xiaoyong Chen *et al.*, pp. 5665–5678.

Image reproduced by permission of Peiling Hu, Han Tan, Weiping Xu, Shijian Liu, Jiajia Song, Xiaoyong Chen and Huayi Suo from *Food Funct.*, 2025, **16**, 5665.

EDITORIAL

5664

Outstanding Reviewers for *Food & Function* in 2024

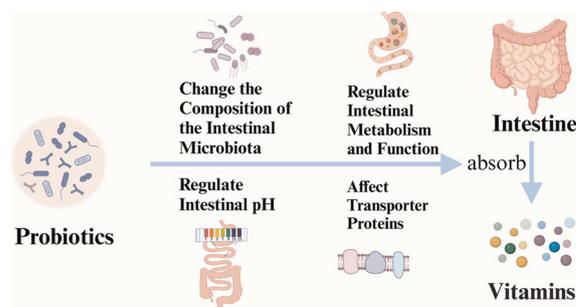


REVIEWS

5665

Probiotics enhance vitamin absorption in the intestine: influencing factors and potential mechanisms

Peiling Hu, Han Tan, Weiping Xu, Shijian Liu, Jiajia Song, Xiaoyong Chen* and Huayi Suo*



Advance your career in science

with professional recognition that showcases
your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment
to attaining excellence in
your field

Gain the recognition you deserve

Achieve a professional
qualification that inspires
confidence and trust

Unlock your career potential

Apply for our professional
registers (RSci, RSciTech)
or chartered status
(CChem, CSci, CEnv)

Apply now

rsc.li/professional-development

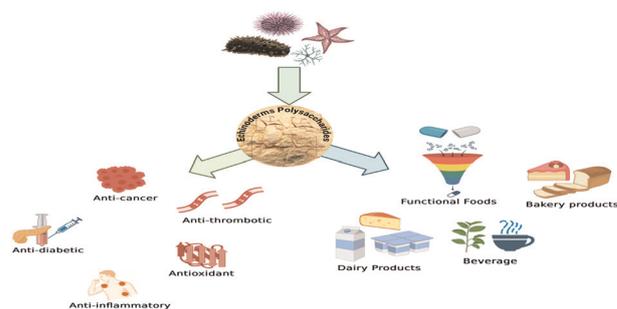


REVIEWS

5679

Polysaccharides from echinoderms: unlocking health benefits and food applications – a review

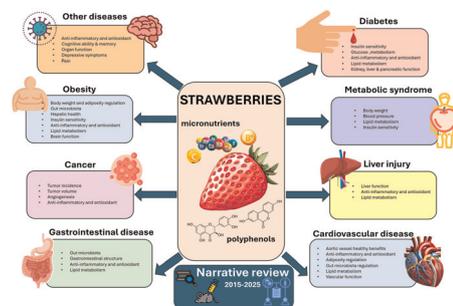
Abu Saeid, Deepika Dave* and Fereidoon Shahidi*



5705

Strawberry as a health promoter: an evidence-based review. Where are we 10 years later?

Danila Cianciosi, Yasmany Armas Diaz, Zexiu Qi, Bei Yang, Ge Chen, Manuela Cassotta, Santos Gracia Villar, Luis Alonso Dzul Lopez, Lorenzo Rivas Garcia, Tamara Yuliet Forbes Hernandez, Di Zhang, Luca Mazzoni, Bruno Mezzetti, Maurizio Battino* and Francesca Giampieri



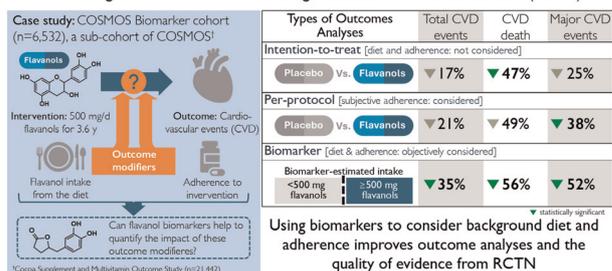
PAPERS

5733

The overlooked impact of background diet and adherence in nutrition trials

Javier I. Ottaviani, Hagen Schroeter, Dennis M. Bier, John W. Erdman Jr, Howard D. Sesso, JoAnn E. Manson and Gunter G. C. Kuhnle*

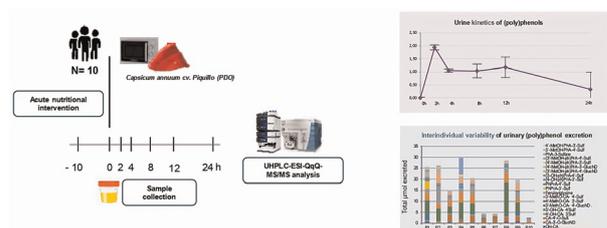
Accounting for Diet and Adherence using Biomarkers in RTCs in nutrition (RCTN)



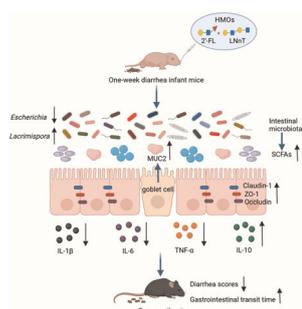
5744

Urinary excretion kinetics of (poly)phenolic metabolites derived from the consumption of microwaved Piquillo pepper (*Capsicum annuum* cv. Piquillo)

Cristina Del Burgo-Gutiérrez, Nicole Tosi, Concepción Cid, Daniele Del Rio, Letizia Bresciani, Iziar A. Ludwig,* Pedro Mena* and María-Paz De Peña



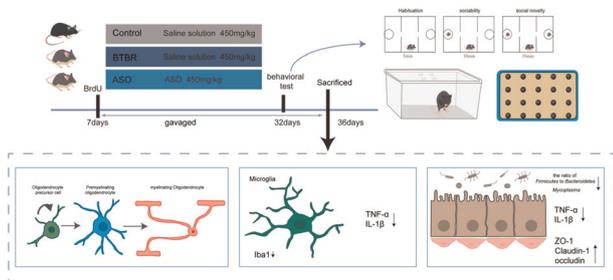
5757



Human milk oligosaccharides mitigate infant diarrhea and anxiety-like behaviors *via* gut microbiota modulation in an EPEC O127 infection model

Wenxiu Wang, Zhuo Liu, Ying He, Xue Wang, Jiabin Ma, Jingyi Ma, Pengfei Chang, Huidong Huang, Tian Yuan, Rui Guo, Yibing Ning* and Zhigang Liu*

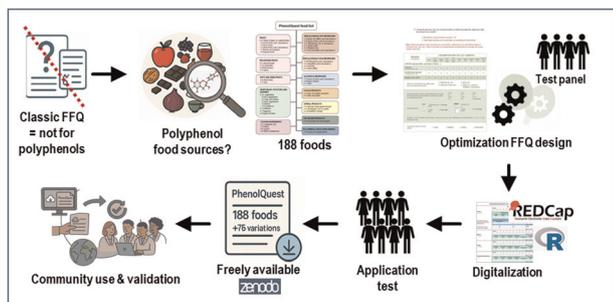
5771



Acer truncatum oil ameliorates autism-like behaviours by promoting maturation of oligodendrocytes and inhibiting neuroinflammation: the role of the brain–gut axis

Jing Li, Xuejun Chai,* Dongfeng Song, Mengli Wang, Penghao Sun, Yongkang Zhao, Duoduo Ren, Feng Liu, Hong Ni, Yonghong Jiang, Xiaoyan Zhu, Enyao Li* and Shanting Zhao*

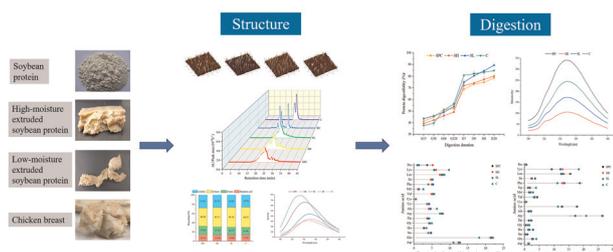
5791



PhenolQuest: a new reference FFQ for a more precise and comparable assessment of (poly)phenol intake in Europe

Dorian Teissandier, Charlotte Gillet, Soline Chaumont, Sylvie Mercier, Marie Lefebvre, Wiame Lasri, Aïcha Djama Guedi, Marie Taillandier, Nathalie Hanet, Liliana Jimenez, Laetitia Demaretz, Christine Morand and Claudine Manach*

5809



Structural and digestibility characterization of soybean protein, textured soybean-based protein and chicken breast: a comparative study

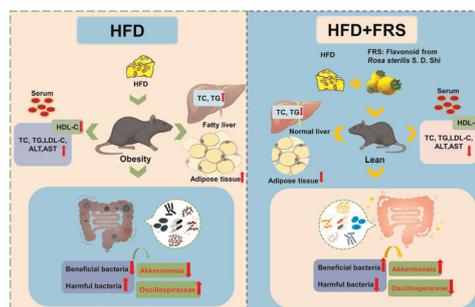
Yuxiang Wang, Zhaojun Zheng, Kun Liu, Yan Zhang, Chong Chen and Yuanfa Liu*



5822

Flavonoids of *Rosa sterilis* S. D. Shi improve high-fat diet-induced obesity in mice by inhibiting lipid accumulation and regulating the gut microbiota

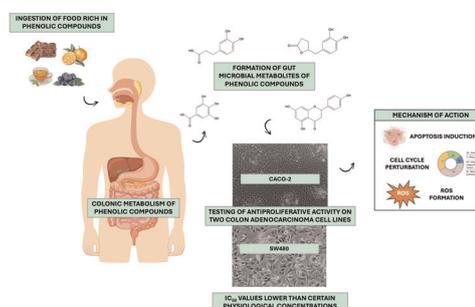
Rui-Xue Yu, Xu-Lu Luo, Ji-Qiu Wang, Jiao-Jiao Li, Hejiang Zhou, Yong-He Li* and Ling-Yan Su*



5836

Gut microbial metabolites of phenolic compounds inhibit colon cancer cell proliferation by triggering apoptosis and cell cycle arrest

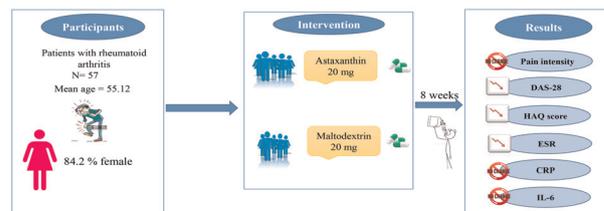
Melissa Zannini, Maddalena De Angeli, Angela Conte, Vincenzo Minischetti, Domenico D'Arca, Davide Tagliacruzchi* and Alice Cattivelli



5850

Astaxanthin supplement improves clinical outcomes, quality of life, and inflammatory factors in patients with rheumatoid arthritis: a randomized clinical trial

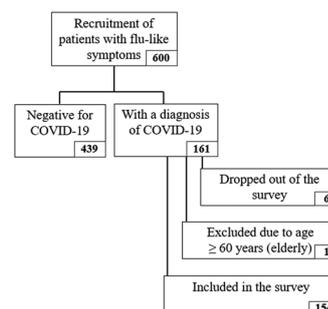
Ani Grigorian, Ali Tabatabaeyan, Mansour Salesi, Awat Feizi, Ali-Reza Ahmadi and Marzieh Kafeshani*



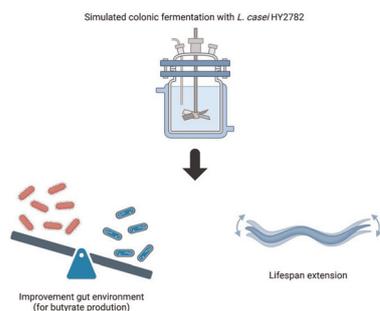
5859

Consumption of polyphenols, lipid profile, and markers of lipid peroxidation in patients with COVID-19

Margarete Almeida Freitas de Azevedo, Vanessa Brito Lira de Carvalho, Nayara Vieira do Nascimento Monteiro, Maísa Guimarães Silva Primo, Vitória Ribeiro Mendes, Luciana Melo de Farias, Mayara Storel Beserra de Moura, Laís Lima de Castro Abreu, Joyce Lopes Macedo, Poliana Cristina de Almeida Fonseca Viola, Emídio Marques de Matos Neto, Jacenir Reis dos Santos Mallet and Maria do Carmo de Carvalho e Martins*



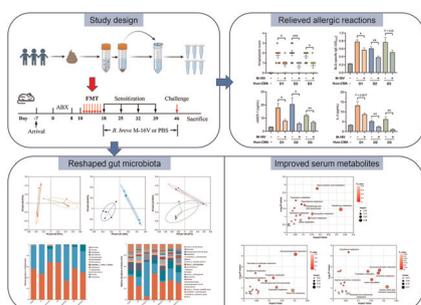
5871



Lactocaseibacillus casei HY2782 improves the intestinal barrier and tract environment and ultimately prolongs the lifespan of *Caenorhabditis elegans*

Won-Young Bae, Uyen Tran Tu Nguyen, Tram Anh Ngoc Le, Son Hung Tran, Sohyun Lee, Sung-Chul Hong, Kwang Hyun Cha, Il-Dong Choi and Kyungsu Kang*

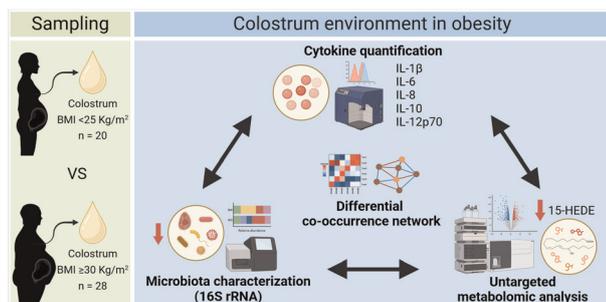
5885



Bifidobacterium breve M-16V alleviates cow's milk allergy by regulating the gut microbiota and metabolites in human microbiota-associated mice

Huming Shao, Fangfang Min, Tianliang Bai, Yan Liu, Shuangyan Zheng, Yong Wu, Can Di, Min Lin, Xin Li* and Hongbing Chen

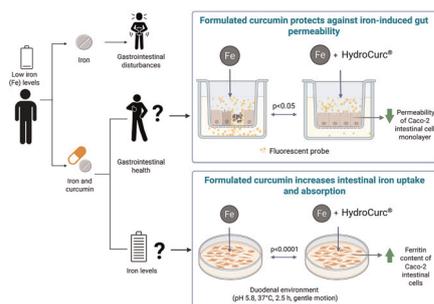
5900



Analysis of human colostrum reveals differential co-occurrence networks of metabolites, microbiota and cytokines in maternal obesity

July S. Gámez-Valdez, Karina Corona-Cervantes, Erick S. Sánchez-Salguero, Mario R. Alcorta-García, Claudia N. López-Villaseñor, Rommel A. Carballo-Castañeda, Aldo Moreno-Ulloa, Víctor J. Lara-Díaz, Marion E. G. Brunck and Cuauhtémoc Licona-Cassani*

5917



Co-administration of curcumin forms with supplemental iron: a study of effects on iron absorption and intestinal cellular health

Marta M. Gámez-Fernández, Helena Tiekou Lorinczova, Stefanie Ho Yi Chan, Satyanarayana Somavarapu, Vinood B. Patel, Sanjoy K. Deb and Mohammed Gulrez Zariwala*

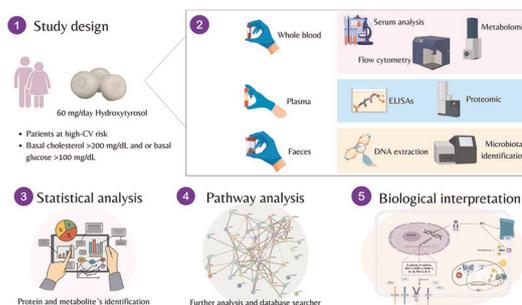


PAPERS

5928

Multi-omic analysis and platelet function distinguish treatment responses to hydroxytyrosol in cardiovascular risk

Clara Noguera-Navarro, Kasper T. Vinten, David Auñón-Calles, Carmen Carazo-Díaz, Georges E. Janssens and Silvia Montoro-García*



CORRECTION

5949

Correction: Protective effect of three glucomannans from different plants against DSS induced colitis in female BALB/c mice

Liu-Jing Zhang, Xiao-Jun Huang, Xiao-Dan Shi, Hai-Hong Chen, Steve W. Cui and Shao-Ping Nie*

