metabolomics

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:36084617	Machine learning integration of multimodal data identifies key features of blood pressure regulation	Panayiotis Louca Tran Quoc Bao Tran Clea du Toit Paraskevi Christofidou Tim D Spector Massimo Mangino Karsten Suhre Sandosh Padmanabhan Cristina Menni	BACKGROUND: Association studies have identified several biomarkers for blood pressure and hypertension, but a thorough understanding of their mutual dependencies is lacking. By integrating two different high-throughput datasets, biochemical and dietary data, we aim to understand the multifactorial contributors of blood pressure (BP).	pmid:36084617 doi:10.1016/j.ebiom.2022.104243	Fri, 09 Sep 2022 06:00:00 -0400
2	pubmed:36084673	Effects of tetracycline, sulfonamide, fluoroquinolone, and lincosamide load in pig slurry on lettuce: Agricultural and human health implications	V Matamoros M Escolà Casas E Pastor Tadi N Cañameras N Carazo J M Bayona	The application of pig slurry as fertilizer in agriculture provides nutrients, but it can also contain veterinary medicines, including antibiotic residues (ABs), which can have an ecotoxicological impact on agroecosystems. Furthermore, uptake, translocation, and accumulation of ABs in crops can mobilize them throughout the food chain. This greenhouse study aims to assess AB uptake from soil fertilized with pig slurry and its phenotypical effects on Lactuca sativa L. The plants were cropped in...	pmid:36084673 doi:10.1016/j.envres.2022.114237	Fri, 09 Sep 2022 06:00:00 -0400
3	pubmed:36084710	Effects of estradiol- and ethinylestradiol-based contraceptives on adrenal steroids: A randomized trial	Marika H Kangasniemi Riikka K Arffman Annina Haverinen Kaisu Luiro Steinar Hustad Oskari Heikinheimo Juha S Tapanainen Terhi T Piltonen	CONCLUSIONS: In COCs, EV had a milder effect on circulating CBG and adrenal steroid levels than EE; however, further research is necessary to determine the long-term effects.	pmid:36084710 doi:10.1016/j.contraception.2022.08.009	Fri, 09 Sep 2022 06:00:00 -0400
4	pubmed:36084723	Differential effects of thiamethoxam and clothianidin exposure on their tissue distribution and chronic toxicity in mice	Li Li Hongwu Liang Tingting Zhao Yu Liu Sen Yan Wentao Zhu	The frequent application of second-generation neonicotinoids thiamethoxam (TMX) and clothianidin (CLO) has led to a high detectable rate in environment samples and poses threats to nontarget organisms and human beings, however, the information on the influences of long-term exposure at low doses was limited. In this study, the tissue distribution of TMX and CLO in mice at acceptable daily intake (ADI) level and 5 × ADI was determined and the health effects were assessed. TMX and CLO were...	pmid:36084723 doi:10.1016/j.cbi.2022.110149	Fri, 09 Sep 2022 06:00:00 -0400
5	pubmed:36084765	Comparative transcriptomic analysis identifies KcMYB1 as a R2R3-MYB anthocyanin activator in Kadsura coccinea	Ding Huang Shiqiang Xu Yanhong Qin Yingjie Li Ruhong Ming Rongshao Huang Jihua Wang Yong Tan	Fruit color, as an important appearance attribute, is crucial for attracting consumers. However, the underlying mechanism regulating mature fruit color formation in Kadsura coccinea remains unclear. Here, a comprehensive metabolomics and transcriptomics analysis was performed to investigate the molecular mechanisms of anthocyanin accumulation between two K. coccinea cultivars with different mature fruit colors-'Dahong No. 1' (red) and 'Jinhu' (yellow). Targeted metabolomic analysis revealed high...	pmid:36084765 doi:10.1016/j.plantsci.2022.111458	Fri, 09 Sep 2022 06:00:00 -0400

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6	pubmed:36084774	The fecal arsenic excretion, tissue arsenic accumulation, and metabolomics analysis in sub-chronic arsenic-exposed mice after in situ arsenic-induced fecal microbiota transplantation	Yu Luo Jiating Wang Chenfei Wang Dongbin Wang Chengji Li Bin Zhang Xiaoting Zhong Linkang Chen Hao Li Hongtian Su Qiuyi Zheng Dajian Zhu Huanwen Tang Lianxian Guo	Arsenic can be specifically enriched by rice, and the health hazards caused by high arsenic rice are gradually attracting attention. This study aimed to explore the potential of microbial detoxification via gut microbiome in the treatment of sub-chronic arsenic poisoning. We first exposed mice to high-dose arsenic feed (30 mg/kg, rice arsenic composition) for 60 days to promote arsenic-induced microbes in situ in the gastrointestinal tract, then transplanted their fecal microbiota (FMT) into...	pmid:36084774 doi:10.1016/j.scitotenv.2022.158583	Fri, 09 Sep 2022 06:00:00 -0400
7	pubmed:36084856	An epigenetic modifier enhances the generation of anti-phytopathogenic compounds from the endophytic fungus Chaetomium globosporum of Euphorbia humifusa	Xiao-Ying Cai Na Li Yong Li Rui-Jia Zhang Ping Lin Ling Liu Hao-Yu Ye Wen-Shuang Wu Min Zhao	Endophytic fungi are striking resources rich in bioactive structures with agrochemical significance. In order to maximize the opportunity of search for bioactive compounds, chemical epigenetic manipulation was introduced to enhance the structural diversity of the fungal products, and an UPLC-ESIMS and bioassay-guided separation was used to detect novel bioactive metabolites. Consequently, four previously undescribed compounds including two cyclopentenones (globosporins A and B) and two...	pmid:36084856 doi:10.1016/j.phytochem.2022.113426	Fri, 09 Sep 2022 06:00:00 -0400
8	pubmed:36084871	Antioxidant and anti-aging activities of Laminaria japonica polysaccharide in Caenorhabditis elegans based on metabonomic analysis	Na Li Quancen Li Xiaoyu He Xiaoxiang Gao Linxiu Wu Meifang Xiao Wenwen Cai Bin Liu Feng Zeng	In this study, Laminaria japonica polysaccharide (LJP) was measured in vitro against three antioxidant indicators: DPPH, ABTS, and hydroxyl. In vivo, LJP investigated thermal tolerance, H(2)O(2)-induced oxidative stress tolerance, and lipofuscin in Caenorhabditis elegans (C. elegans). Following that, after LJP treatment, the effects and underlying mechanisms were investigated at the mRNA and metabolite levels. We discovered the free radical scavenging activity of LJP. The thermal tolerance of C....	pmid:36084871 doi:10.1016/j.ijbiomac.2022.09.008	Fri, 09 Sep 2022 06:00:00 -0400
9	pubmed:36085081	Association of the inflammation-related proteome with dementia development at older age: results from a large, prospective, population-based cohort study	Kira Trares Megha Bhardwaj Laura Perna Hannah Stocker Agnese Petrera Stefanie M Hauck Konrad Beyreuther Hermann Brenner Ben Schöttker	CONCLUSION: With this large, population-based cohort study, we show for the first time that the majority of inflammation-related proteins measured in blood samples are associated with total dementia incidence. Future studies should concentrate not only on single biomarkers but also on the complex relationships in biomarker clusters.	pmid:36085081 doi:10.1186/s13195-022-01063-y	Fri, 09 Sep 2022 06:00:00 -0400
10	pubmed:36085351	Integrated multi-omics reveal important roles of gut contents in intestinal ischemia-reperfusion induced injuries in rats	Die Dai Fandie Dai Jingchao Chen Menglu Jin Mingyue Li Desheng Hu Zhi Liu Zunjian Zhang Fengguo Xu Wei-Hua Chen	Intestinal ischemia-reperfusion (IIR) is a life-threatening clinical event with damaging signals whose origin and contents are unclear. Here we observe that IIR significantly affect the metabolic profiles of most organs by unbiased organ-wide metabolic analysis of gut contents, blood, and fifteen organs in rats (n = 29). Remarkably, correlations between gut content metabolic profiles and those of other organs are the most significant. Gut contents are also the only ones to show dynamic...	pmid:36085351 doi:10.1038/s42003-022-03887-8	Sat, 10 Sep 2022 06:00:00 -0400

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11	pubmed:36085367	Metabolomic profiling of intrauterine growth-restricted preterm infants: a matched case-control study	Elena Priante Giovanna Verlato Matteo Stocchero Giuseppe Giordano Paola Pirillo Luca Bonadies Silvia Visentin Laura Moschino Eugenio Baraldi	CONCLUSIONS: Neonates with IUGR showed a distinctive urinary metabolic profile at birth. Although results are preliminary, metabolomics is proving to be a promising tool to explore biochemical pathways involved in this disease.	pmid:36085367 doi:10.1038/s41390-022-02292-5	Sat, 10 Sep 2022 06:00:00 -0400
12	pubmed:36085529	The evaluation of fecal microbiota transplantation vs vancomycin in a Clostridioides difficile infection model	Qiaomai Xu Shumeng Zhang Jiazheng Quan Zhengjie Wu Silan Gu Yunbo Chen Beiwen Zheng Longxian Lv Lanjuan Li	Vancomycin is the preferred treatment for Clostridioides difficile infection (CDI) but has been associated with a high recurrence rate of CDI in treated patients. Fecal microbiota transplantation (FMT) has emerged as a remarkably successful treatment for recurrent CDI (rCDI). Herein, we present a mouse model of CDI to further define the changes in intestinal inflammation, flora, and metabolites following FMT versus vancomycin treatment and to find the potential therapy to restore colonization...	pmid:36085529 doi:10.1007/s00253-022-12154-z	Sat, 10 Sep 2022 06:00:00 -0400
13	pubmed:36086864	Modified Taohong Siwu decoction improves cardiac function after myocardial ischaemia and reperfusion in rats by promoting endogenous stem cell mobilization and regulating metabolites	Wan-Ting Meng Zhong-Xin Xiao Han Li Ya-Chao Wang Yue Zhao Yan Zhu Hai-Dong Guo	CONCLUSIONS: Endogenous stem cell mobilization and metabolic regulation were related to the cardioprotection of modified THSWD. We provided a new strategy and direction for the treatment of cardiovascular diseases with traditional Chinese medicine.	pmid:36086864 doi:10.1080/13880209.2022.2116054	Sat, 10 Sep 2022 06:00:00 -0400
14	pubmed:36086915	Genetic determinants of circulating metabolites on risk of stroke and its subtypes	Rong-Ze Wang Shu-Yi Huang Hong-Qi Li Yu-Xiang Yang Shi-Dong Chen Jin-Tai Yu	CONCLUSIONS: Genetically determined levels of lipids in small LDL were associated with the risk of stroke, suggesting a therapeutic strategy targeting small LDL levels may be crucial for stroke prevention. HDL-C was positively associated with the risk of intracerebral hemorrhage.	pmid:36086915 doi:10.1111/ene.15549	Sat, 10 Sep 2022 06:00:00 -0400
15	pubmed:36087260	A Fluorescence-Microscopic System for Monitoring the Turnover of the Autophagic Substrate p62/SQSTM1	Hongzhong Jin Qi Wu Guido Kroemer Oliver Kepp	In conditions of cellular stress and nutrient shortage, macroautophagy (hereafter referred to as autophagy) assures the degradation of dysfunctional macromolecules and organelles as it liberates energy resources via the breakdown of dispensable cellular components. Morphologically, autophagy is characterized by the formation of double-membraned autophagosomes that facilitate the isolation of autophagic cargo for subsequent lysosomal degradation at low pH. Sequestosome-1 (SQSTM1, better known as...	pmid:36087260 doi:10.1007/978-1-0716-2553-8_7	Sat, 10 Sep 2022 06:00:00 -0400