

Supplementary Information

Dietary Administration of Black Raspberries and Arsenic Exposure: Changes in the Gut Microbiota and Its Functional Metabolites

Pengcheng Tu ¹, Qiong Tang ², Zhe Mo ¹, Huixia Niu ¹, Yang Hu ¹, Lizhi Wu ¹, Zhijian Chen ¹, Xiaofeng Wang ^{1,*} and Bei Gao ^{3,4,*}

¹ Department of Environmental Health, Zhejiang Provincial Center for Disease Control and Prevention, 3399 Binsheng Road, Hangzhou 310051, China

² College of Standardization, China Jiliang University, Hangzhou 310018, China

³ School of Marine Sciences, Nanjing University of Information Science and Technology, Nanjing 210044, China

⁴ Key Laboratory of Hydrometeorological Disaster Mechanism and Warning of Ministry of Water Resources, Nanjing University of Information Science and Technology, Nanjing 210044, China

* Correspondence: xfwang@cdc.zj.cn (X.W.); wintergb2012@gmail.com (B.G.)

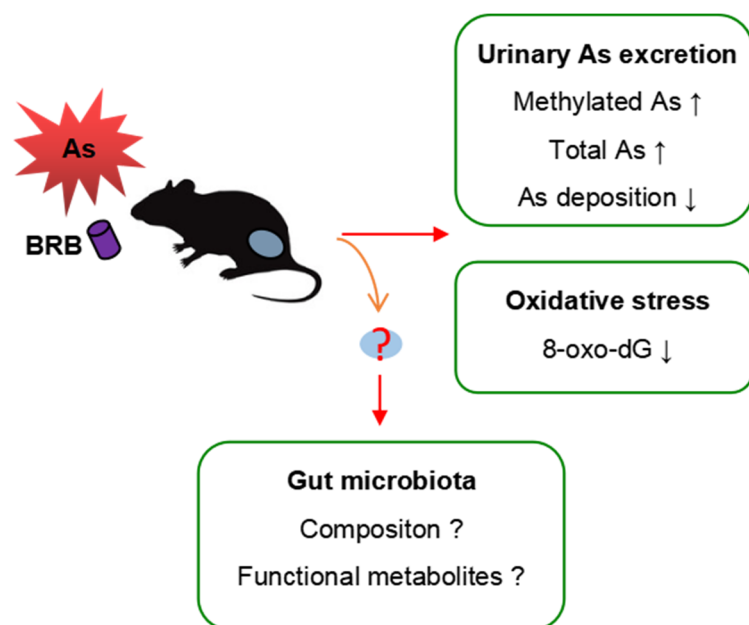










Figure S1. Illustration of effects of BRB consumption on As biotransformation/toxicity.

Order level:

Legend	Taxonomy
	Unassigned;Other;Other;Other
	k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales
	k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales
	k_Bacteria;p_Actinobacteria;c_Coriobacteriia;o_Coriobacteriales
	k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales
	k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta
	k_Bacteria;p_Firmicutes;o_Bacilli;Other
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Lactobacillales
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Turicibacteriales
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales
	k_Bacteria;p_Firmicutes;o_Erysipelotrichi;o_Erysipelotrichales
	k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacteriales
	k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales
	k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales
	k_Bacteria;p_Tenericutes;o_Mollicutes;o_Anaeroplasmatales
	k_Bacteria;p_Tenericutes;o_Mollicutes;o_RF39
	k_Bacteria;p_Verrucomicrobia;o_Verrucomicrobiae;o_Verrucomicrobiales

Family level:




































Legend	Taxonomy
	Unassigned;Other;Other;Other
	k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Pseudonocardiaceae
	k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Bifidobacteriales;f_Bifidobacteriaceae
	k_Bacteria;p_Actinobacteria;c_Coriobacteriia;o_Coriobacteriales;f_Coriobacteriaceae
	k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_
	k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Bacteroidaceae
	k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Rikenellaceae
	k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_S24-7
	k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_
	k_Bacteria;p_Firmicutes;o_Bacilli;Other;Other
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales;f_Bacillaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales;f_Paenibacillaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales;f_Planococcaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales;f_Staphylococcaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Bacillales;f_Thermoactinomycetaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Lactobacillales;Other
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Lactobacillales;f_Enterococcaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Lactobacillales;f_Lactobacillaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Lactobacillales;f_Streptococcaceae
	k_Bacteria;p_Firmicutes;o_Bacilli;o_Turicibacteriales;f_Turicibacteraceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;Other
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Clostridiaceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Dehalobacteriaceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Lachnospiraceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Peptostreptococcaceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Ruminococcaceae
	k_Bacteria;p_Firmicutes;o_Clostridia;o_Clostridiales;f_Mogibacteriaceae
	k_Bacteria;p_Firmicutes;o_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae
	k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacteriales;f_Caulobacteraceae
	k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria
	k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae
	k_Bacteria;p_Tenericutes;o_Mollicutes;o_Anaeroplasmatales;f_Anaeroplasmataceae
	k_Bacteria;p_Tenericutes;o_Mollicutes;o_RF39;f_
	k_Bacteria;p_Verrucomicrobia;o_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae

Figure S2. Legends of bacterial orders or families with each color representing an individual bacterial order or family, respectively.