

**Note to readers with disabilities:** *EHP* strives to ensure that all journal content is accessible to all readers. However, some figures and Supplemental Material published in *EHP* articles may not conform to [508 standards](#) due to the complexity of the information being presented. If you need assistance accessing journal content, please contact [ehponline@niehs.nih.gov](mailto:ehponline@niehs.nih.gov). Our staff will work with you to assess and meet your accessibility needs within 3 working days.

## **Supplemental Material**

### **Gender-Dependent Effects of Cadmium Exposure in Early Life on Gut Microbiota and Fat Accumulation in Mice**

Qian Ba, Mian Li, Peizhan Chen, Chao Huang, Xiaohua Duan, Lijun Lu, Jingquan Li, Rui'ai Chu, Dong Xie, Haiyun Song, Yongning Wu, Hao Ying, Xudong Jia, and Hui Wang

#### **Table of Contents**

**Figure S1.** Effect of Prenatal Cadmium Exposure on Size at Birth. Female C57BL/6J mice received LDC (0.2, 2, 10, 20, 100, or 500 nM in drinking water) a week before mating and throughout the pregnancy. The body weights (A) and body lengths (B) of the pups were measured at birth. \*,  $p < 0.05$ ; \*\*,  $p < 0.01$  compared with the control.

**Figure S2.** Intestinal Bacteria changes at the genus level in 8-week-old female mice. The fecal microbiota in control and LDC female mice at 8 weeks of age were analyzed and the relative abundance of *Prevotella* (A), *Bifidobacterium* (B) and *Sphingomonas* (C) was shown.

**Figure S3.** Effects of LDC on body compositions in male mice with microbiota removal. (A) Study design: After weaning (3 weeks old), control or LDC male mice (control, n=6; LDC, n=4) were treated with ciprofloxacin (0.2 g/L) and metronidazole (1 g/L) in their drinking water. (B-D) Body composition in the control and LDC mice with antibiotics treatment was measured by NMR at 16 weeks of age. \*\*,  $p < 0.01$  compared with the control group.

**Table S1.** The GO terms of biological process enriched by up-regulated differential genes in LDC male mice.