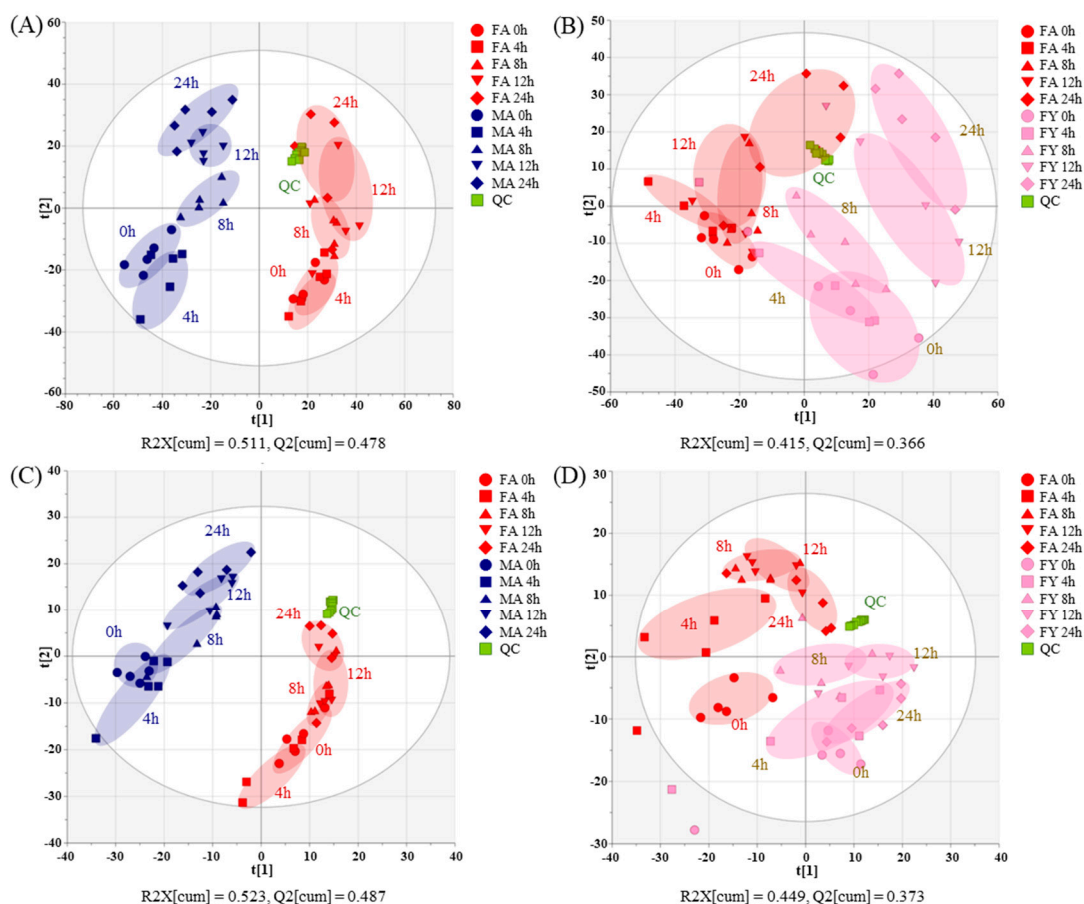


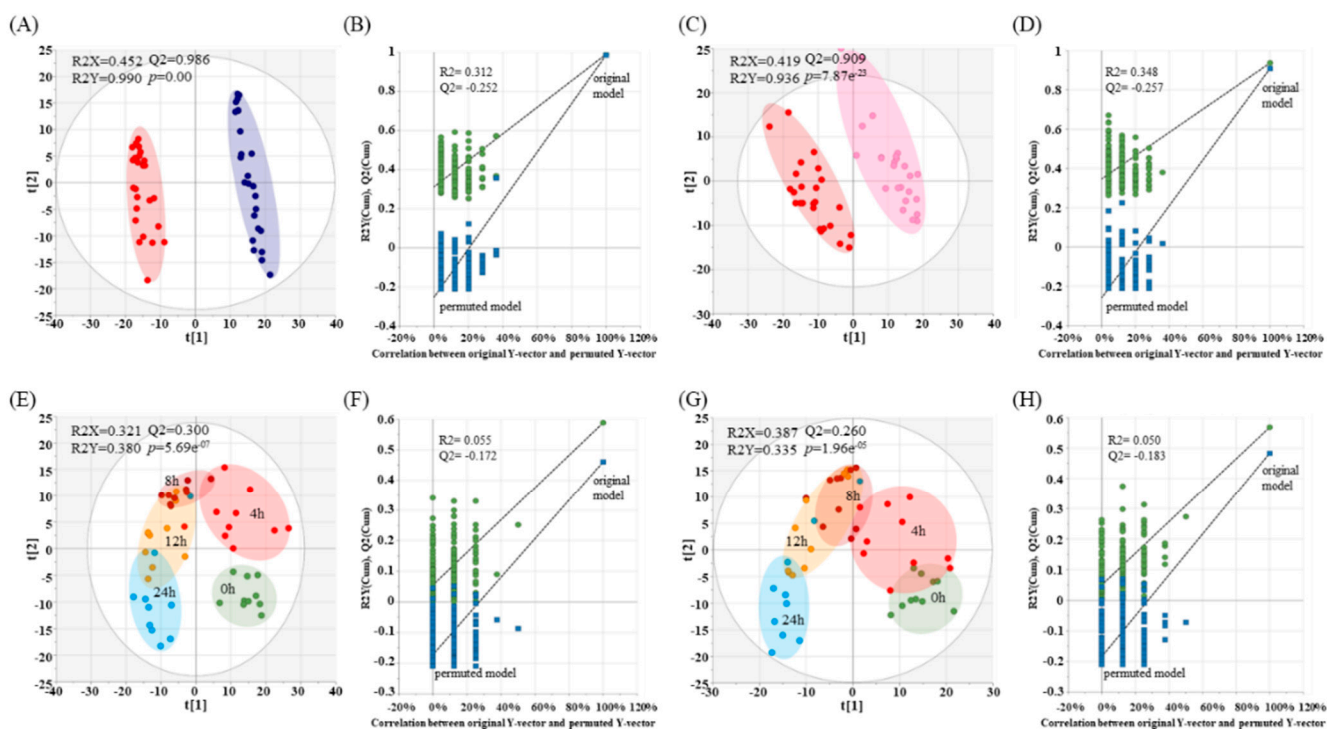
# Supplementary Materials: Untargeted Metabolomics Analysis Reveals Toxicity by Sex and Sexual Maturity of the Single Low-Dose DEHP Exposure

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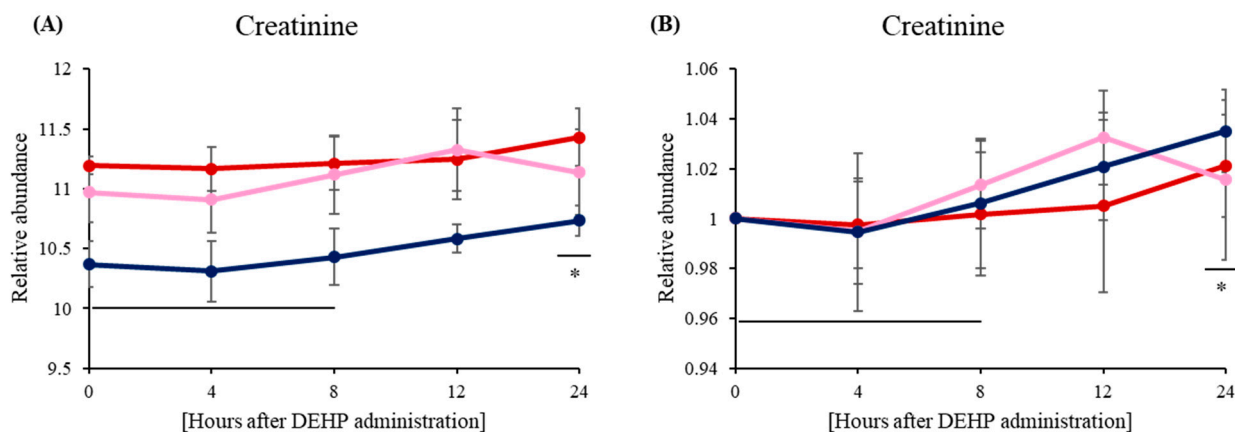
**Figure S1. PCA score plot considering time dependent manner after DEHP exposure.**

(A) and (B) are data acquired by positive mode and (C) and (D) are analyzed using negative mode. All quality control (QC) samples are observed to be clustered correctly.



**Figure S2.** PLS-DA score plot and corresponding cross-validation plots of urinary metabolites, analyzed under negative ionization mode.

For male adults versus female adults: score plot (A) and its time-dependent metabolites post-DEHP absorption (E). For female adolescent versus female adults: score plot (C) and its time-dependent metabolites post-DEHP administration (G). The PLS-DA models were assessed using  $R^2X$ ,  $R^2Y$ ,  $Q^2$ , and  $p$ -values and were cross-validated with a permutation test ( $n = 200$ ). Cross-validation results, depicted by intercepts of  $R^2$  and  $Q^2$ , indicate high statistical significance. Plots (B), (D), (F), and (H) correspond to the validation of (A), (C), (E), and (G), respectively.



**Figure S3.** Relative abundance of urinary creatinine obtained from non-target analysis (A) and its fold change based on basal point (B).

RM-ANOVA determined significant difference of urinary creatinine between female adult and male adults ( $p$ -value  $1.55e^{-5}$ ). According to pairwise comparisons using paired  $t$ -test with bonferroni adjustment, relative abundance and fold changes showed significant differences between 24 h and other time points (0, 4, and 8 h) in sexual model.