

Gender-specific metabolic responses of *Crassostrea hongkongensis* to infection with *Vibrio harveyi* and lipopolysaccharide

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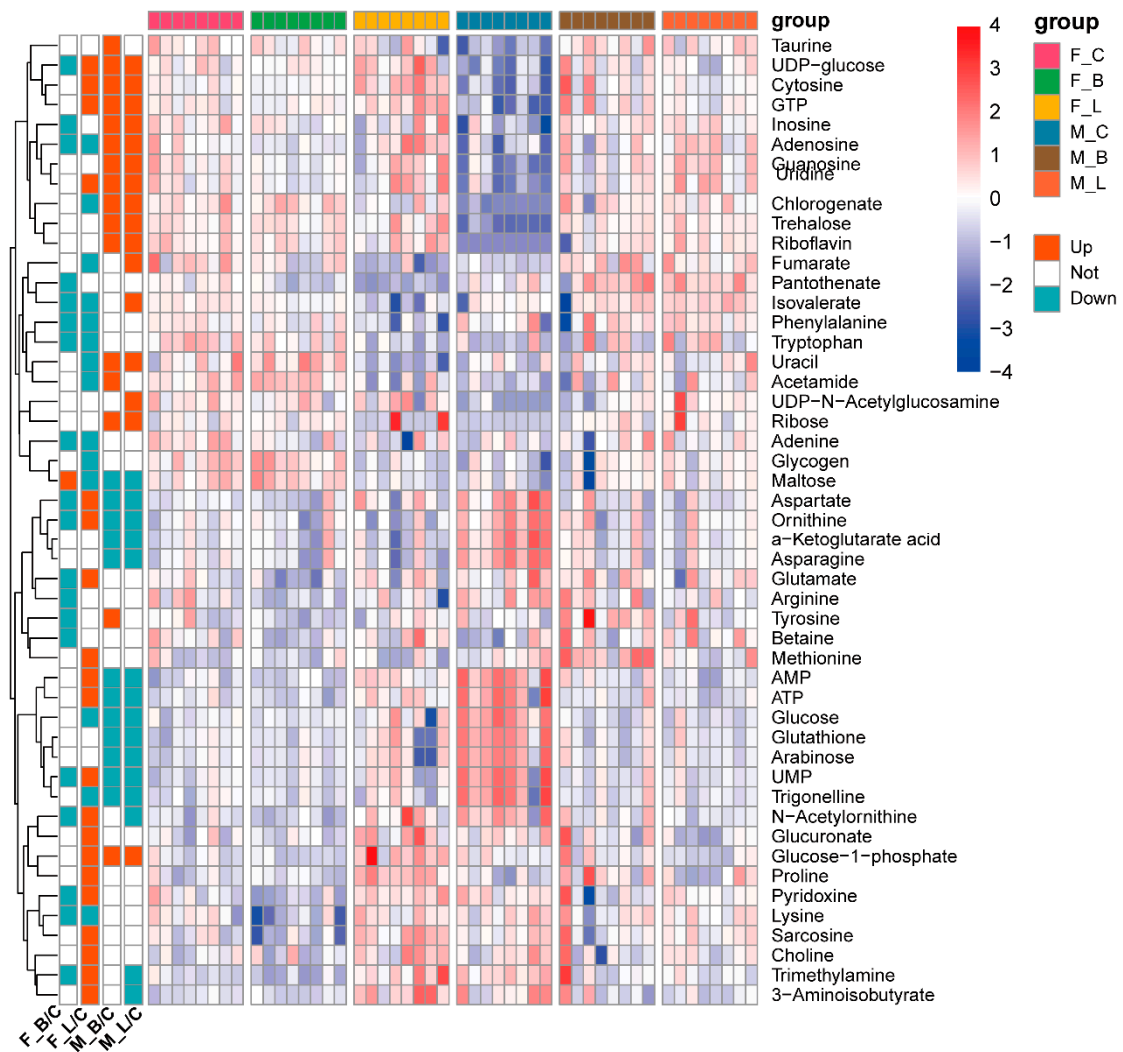


Figure S1. Heat map analysis of changes in metabolites of hepatopancreas tissues in male and female oysters under *Vibrio harveyi* and LPS infection compared to control groups. Groups: F, female; M, male; C, control; B, *V. harveyi* infection; L, LPS infection.

| | | | | | | | | | | | | | |
|-------------------------|------|------|-------|------|------|-------|------|------|-------|-------|------|--------|--|
| Choline | | | | 1.05 | 1.23 | 0.022 | | | | | | | |
| Ornithine | 0.92 | 2.34 | 0.009 | 1.12 | 1.51 | 0.012 | 0.83 | 1.47 | 0.017 | 0.83 | 1.28 | 0.003 | |
| Lysine | 0.92 | 2.54 | 0.008 | 0.88 | 1.27 | 0.030 | | | | | | | |
| α -Ketoglutarate | | | | | | | 0.87 | 1.24 | 0.002 | 0.86 | 1.12 | <0.001 | |
| Asparagine | | | | | | | 0.79 | 1.81 | 0.001 | 0.77 | 1.66 | <0.001 | |
| Trimethylamine | 0.91 | 2.14 | 0.034 | 1.19 | 2.60 | 0.003 | | | | 0.864 | 1.15 | <0.001 | |
| Aspartate | 0.95 | 1.41 | 0.032 | 1.06 | 1.17 | 0.020 | 0.82 | 1.10 | 0.006 | 0.810 | 1.06 | 0.001 | |
| Sarcosine | | | | 1.07 | 1.45 | 0.007 | | | | | | | |
| 3-Aminoisobutyrate | | | | 1.31 | 2.65 | 0.001 | | | | 0.83 | 1.25 | 0.016 | |
| Glutamate | 0.95 | 1.32 | 0.036 | 1.06 | 1.05 | 0.004 | | | | | | | |
| Methionine | | | | 1.16 | 3.03 | 0.001 | | | | | | | |
| Arginine | 0.90 | 2.04 | 0.013 | | | | | | | | | | |
| Pantothenate | 0.95 | 1.00 | 0.004 | | | | | | | | | | |
| Isovalerate | 0.93 | 1.69 | 0.003 | 0.74 | 3.53 | 0.002 | | | | 1.17 | 1.27 | 0.020 | |

F, female group; M, male group; C, control group; B, *Vibrio harveyi* infection group; L, LPS infection group. ^a fold change. ^b variable importance in the projection. ^c *p*-value, representing the significance of the metabolite changes.