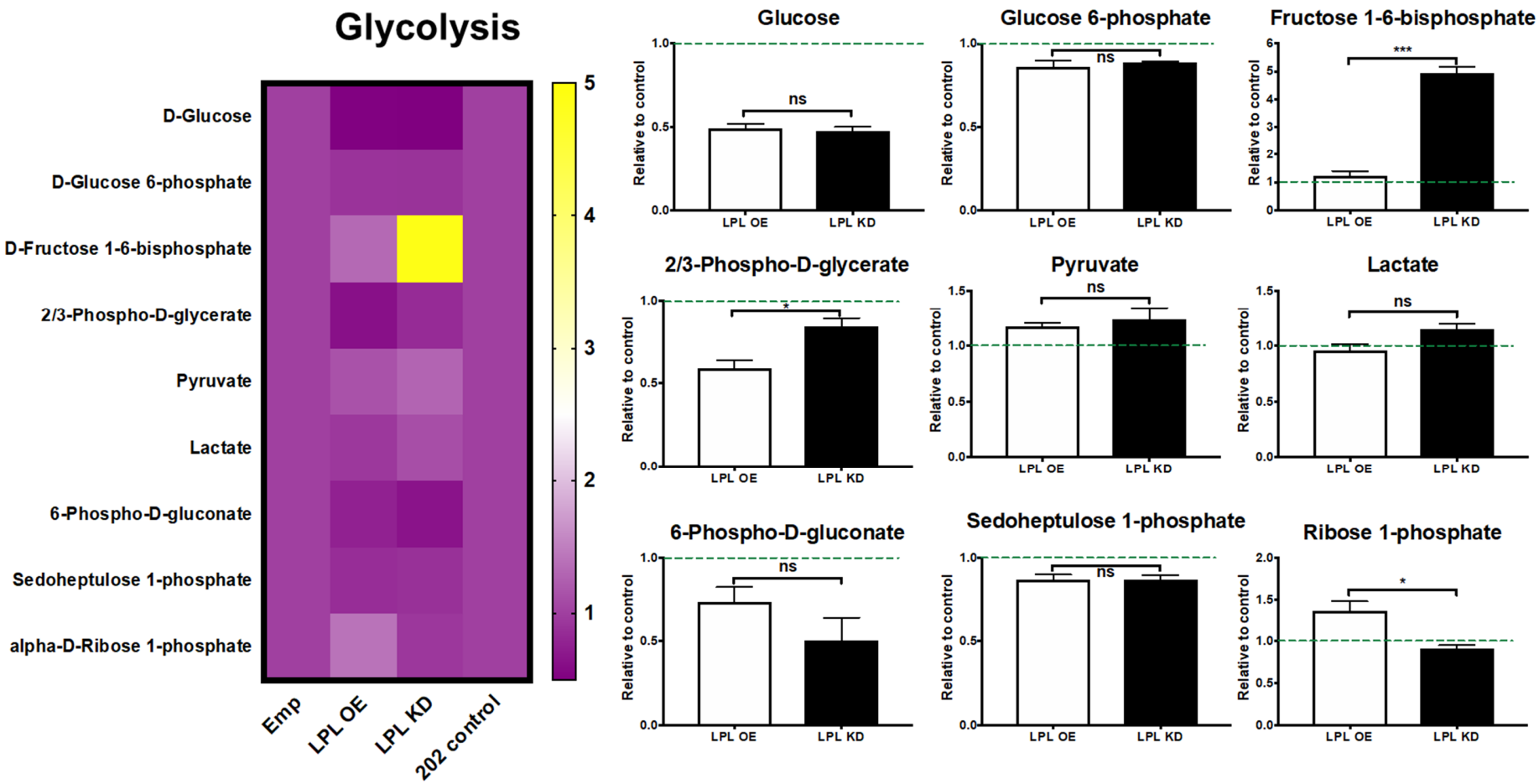
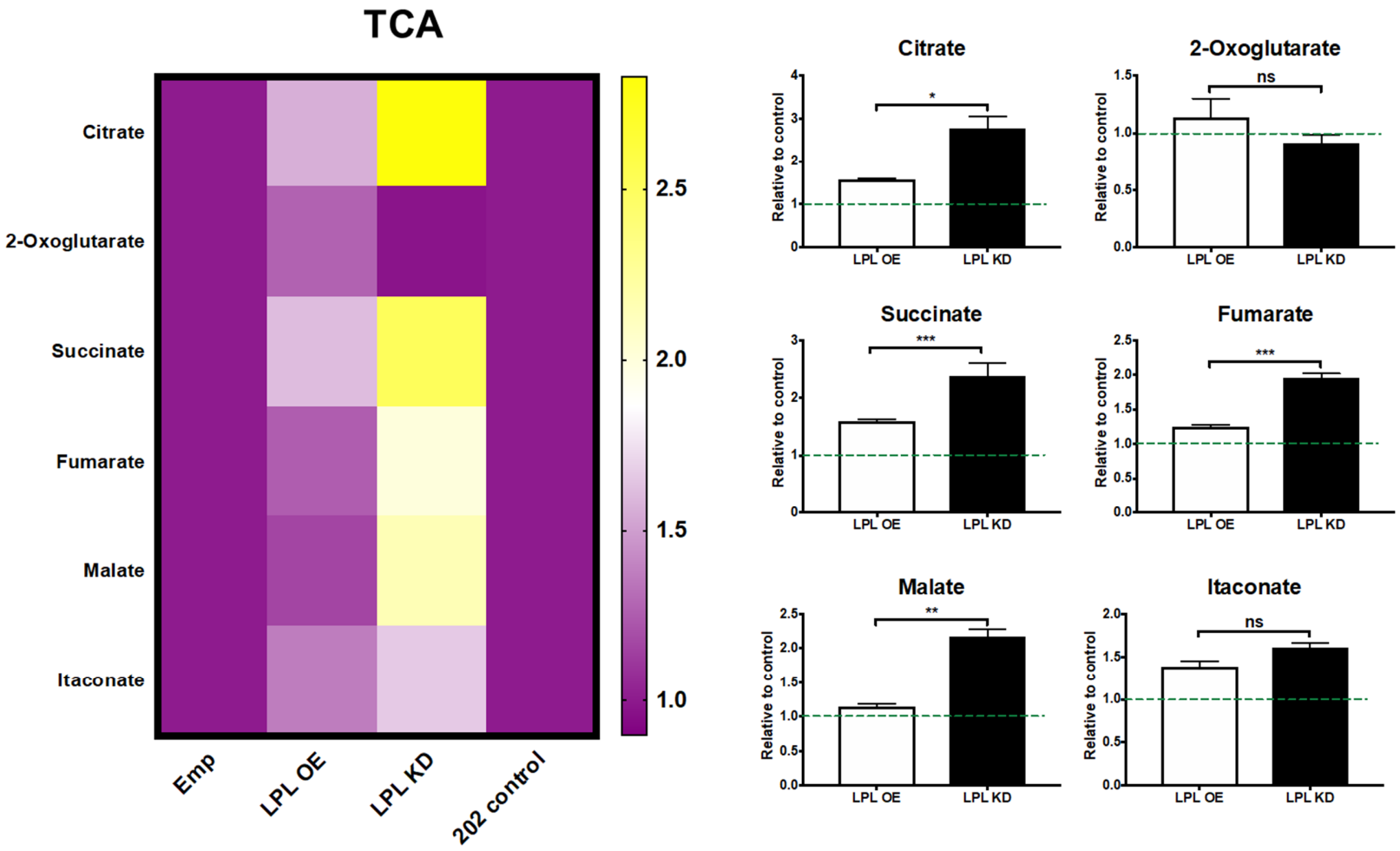
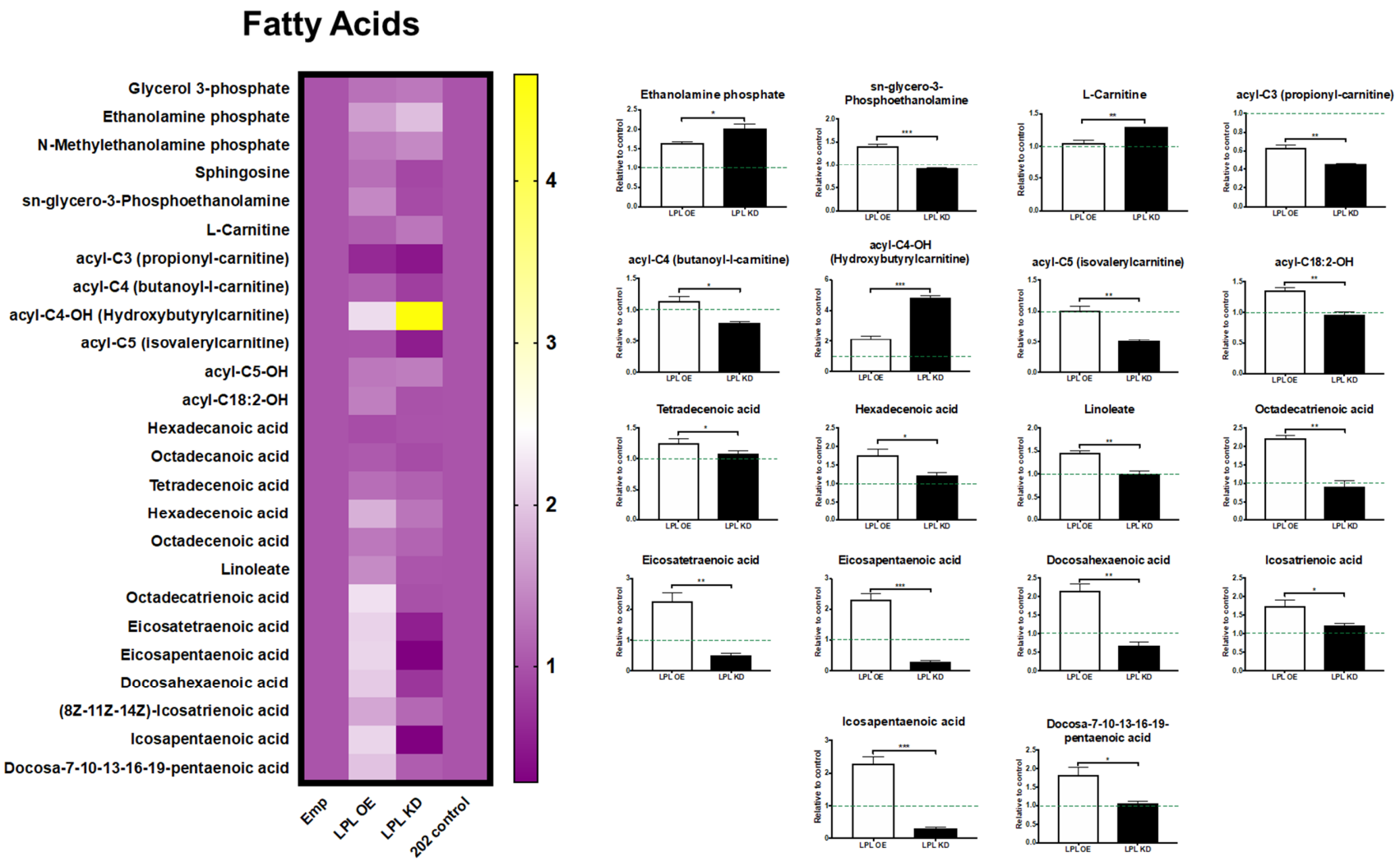


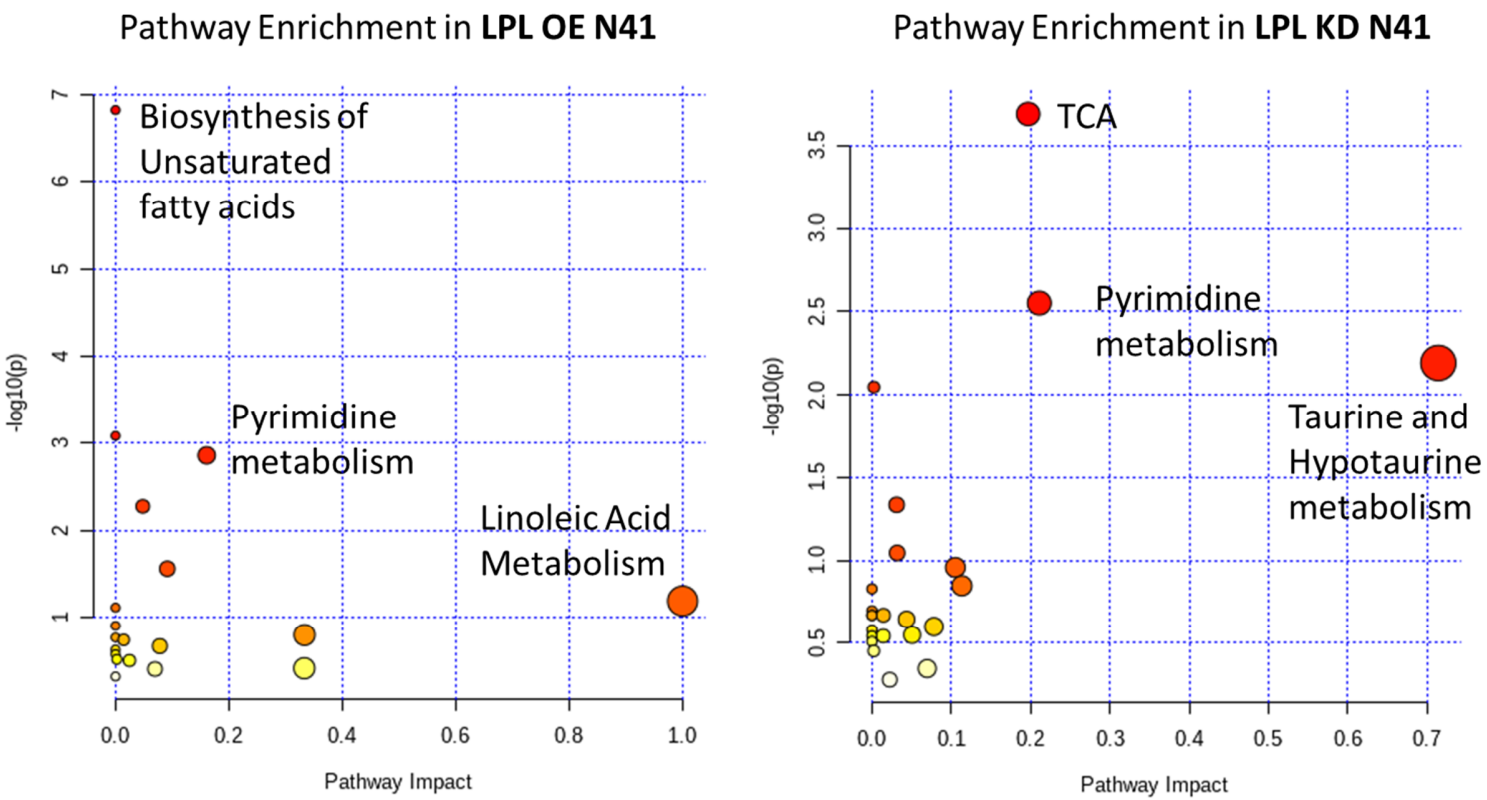
Supplemental Figure 1. Analysis of metabolites in the glycolysis pathway in immortalized hypothalamic neurons either over expressing lipoprotein Lipase (LPL) (LPL OE) versus Empty vector control cells (Emp), or in LPL knock-down cells (LPL KD) versus 202 control cells (202 Control).



Supplemental Figure 2. Analysis of metabolites in the TCA pathway in immortalized hypothalamic neurons either over expressing lipoprotein Lipase (LPL) (LPL OE) versus Empty vector control cells (Emp), or in LPL knock-down cells (LPL KD) versus 202 control cells (202 Control).

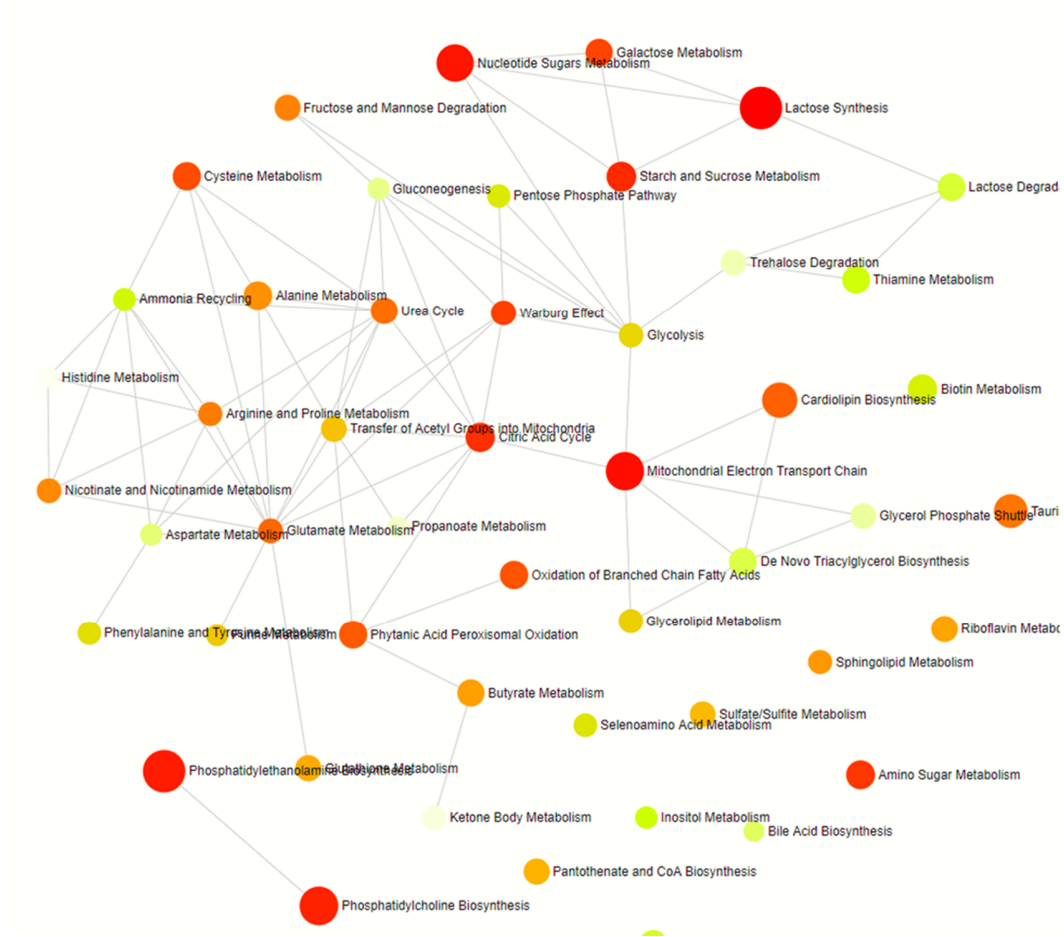


Supplemental Figure 3. Analysis of fatty acid metabolites in immortalized hypothalamic neurons either over expressing lipoprotein Lipase (LPL) (LPL OE) versus Empty vector control cells (Emp), or in LPL knock-down cells (LPL KD) versus 202 control cells (202 Control).



Supplemental Figure 4. Pathway enrichment analysis (MetaboAnalyst) of positively regulated metabolites in immortalized hypothalamic neurons either over expressing lipoprotein Lipase (LPL) (LPL OE), or with depleted LPL (LPL KD).

Supplemental Figure 5. Metabolite Set Enrichment analysis (MetaboAnalyst) of positively regulated metabolites in immortalized hypothalamic neurons either over expressing lipoprotein Lipase (LPL) (LPL OE), or in LPL knock-down cells (LPL KD).



Supplemental Figure 6. Metabolite Set Enrichment map (MetaboAnalyst) of positively regulated metabolites in immortalized hypothalamic LPL knock-down cells (LPL KD).