

Figure S1. Male and Female food intake of *D. melanogaster* on control and curcumin diets. CAFE assay in (µL/fly). Data are mean \pm SEM for n = 5 independent replicates. *, $p \leq 0.05$, **, $p \leq 0.01$, $p \leq 0.001$, NS, not significant, compared to control versus treatment.

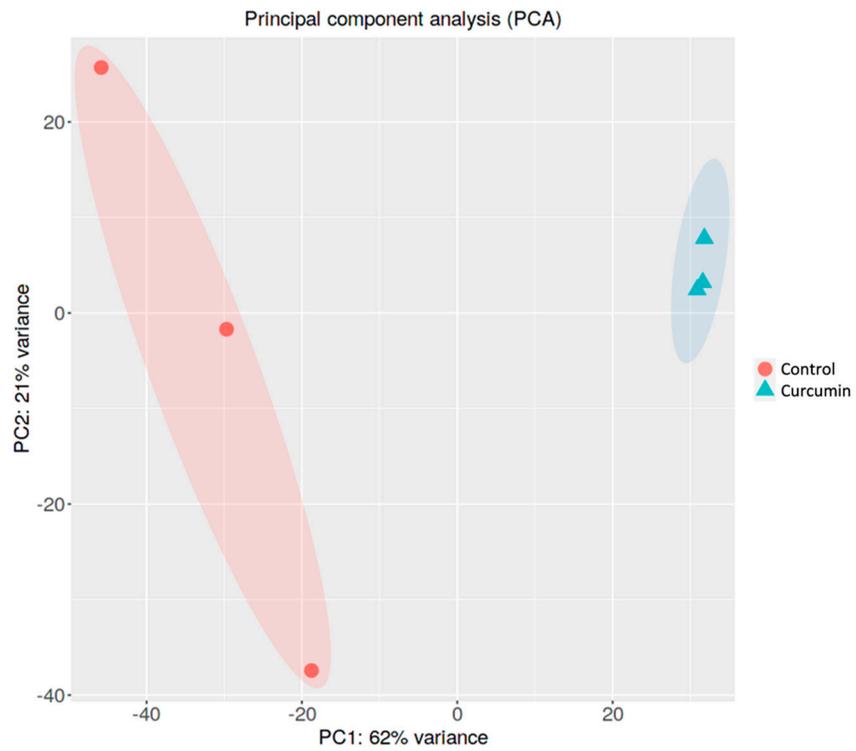


Figure S2. The 2-D principal component analysis score plot demonstrates the statistical clustering of genes in response to a curcumin (blue) and control (red) diet.

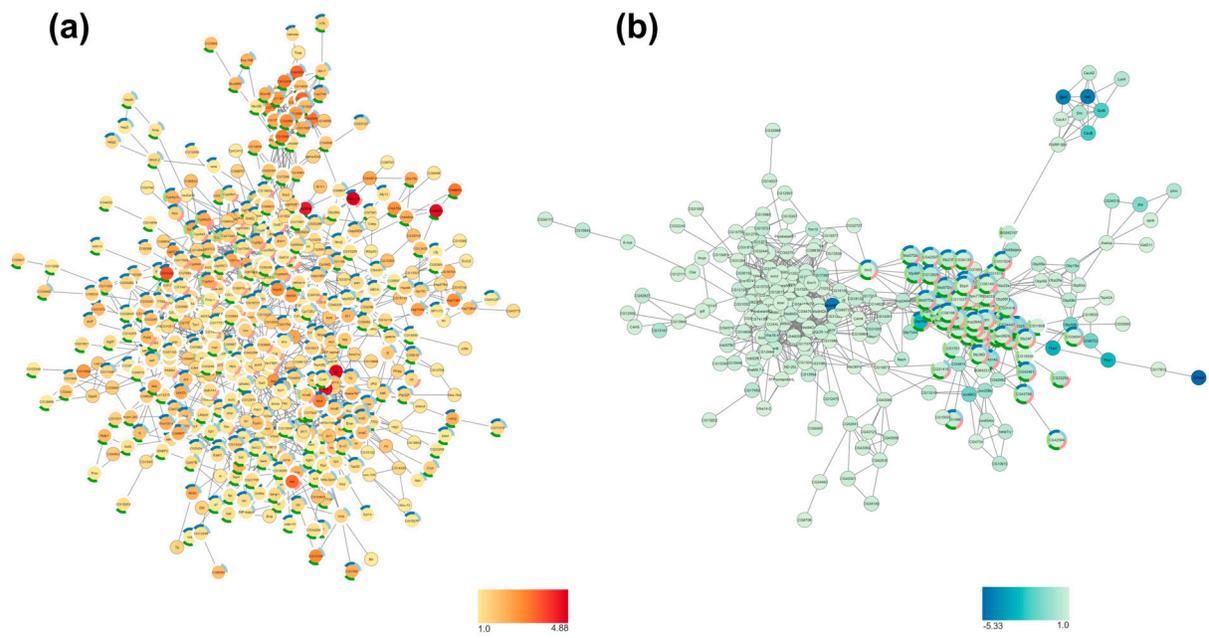


Figure S3. Gene links of the top 100 (a) up- and (b) down-regulated genes in response to curcumin treatment with a cutoff of $p < 0.05$.

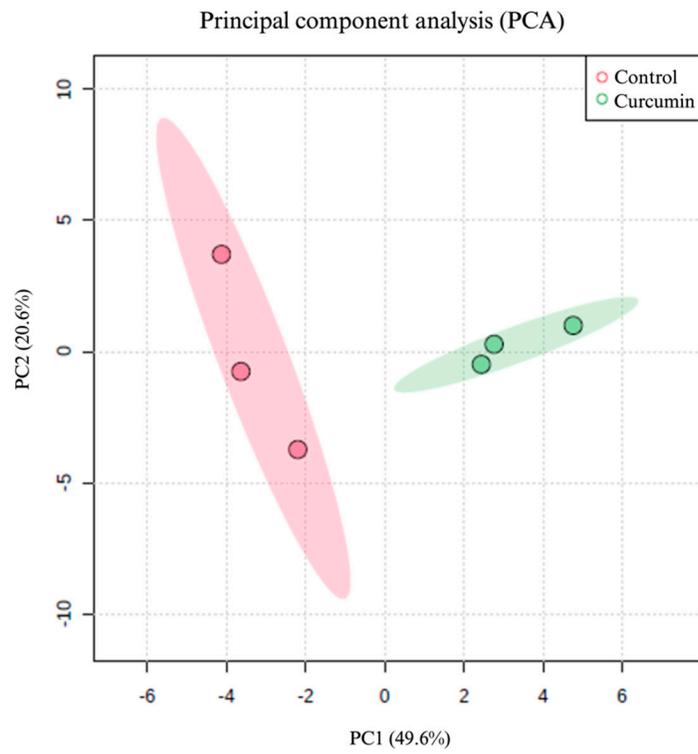


Figure S4. Principal component analysis (PCA) on the metabolomics profiles of *Drosophila* under a regular diet and a curcumin-supplemented diet.