

## Supporting Information

### Metabolic profiling of alcoholic fatty liver in zebrafish (*Danio rerio*)

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Table S1. PCA and PLS-DA modeling results comparing alcoholic fatty liver group and control group.

	models	PCA or PLS-DA components	$R_x^2$	$R_Y^2$	$Q^2$
Aqueous fraction using NMR	PCA	2	0.83		0.73
	PLS-DA	2	0.71	0.99	0.90
Lipophilic fraction using NMR	PCA	2	0.92		0.73
	PLS-DA	2	0.77	0.89	0.50
Lipophilic fraction using GC/MS	PCA	2	0.63		0.25
	PLS-DA	2	0.59	0.97	0.98

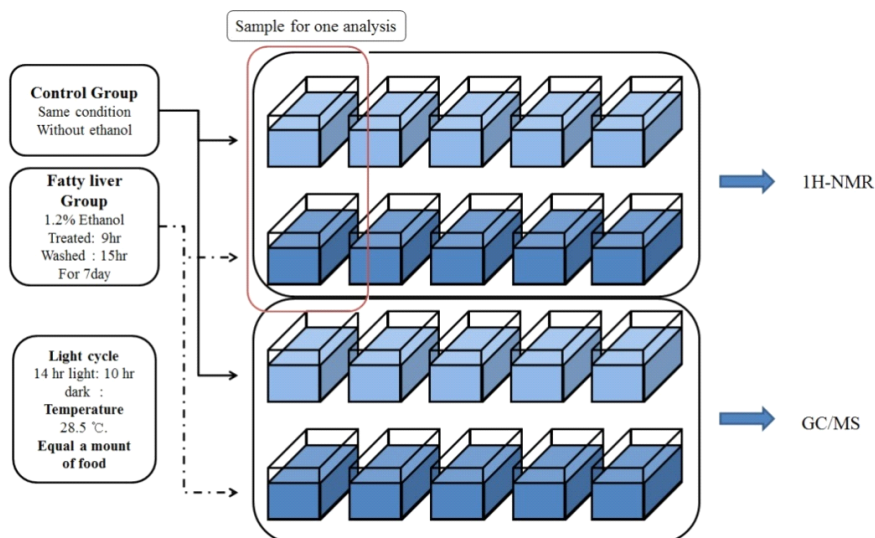


Figure S1. Experiment design for NMR and GC analysis. Each aquarium represents a group of 20 fishes from which the liver were taken. Liver were pooled to equal weights before the extraction of metabolites to account for variation in size of liver samples.

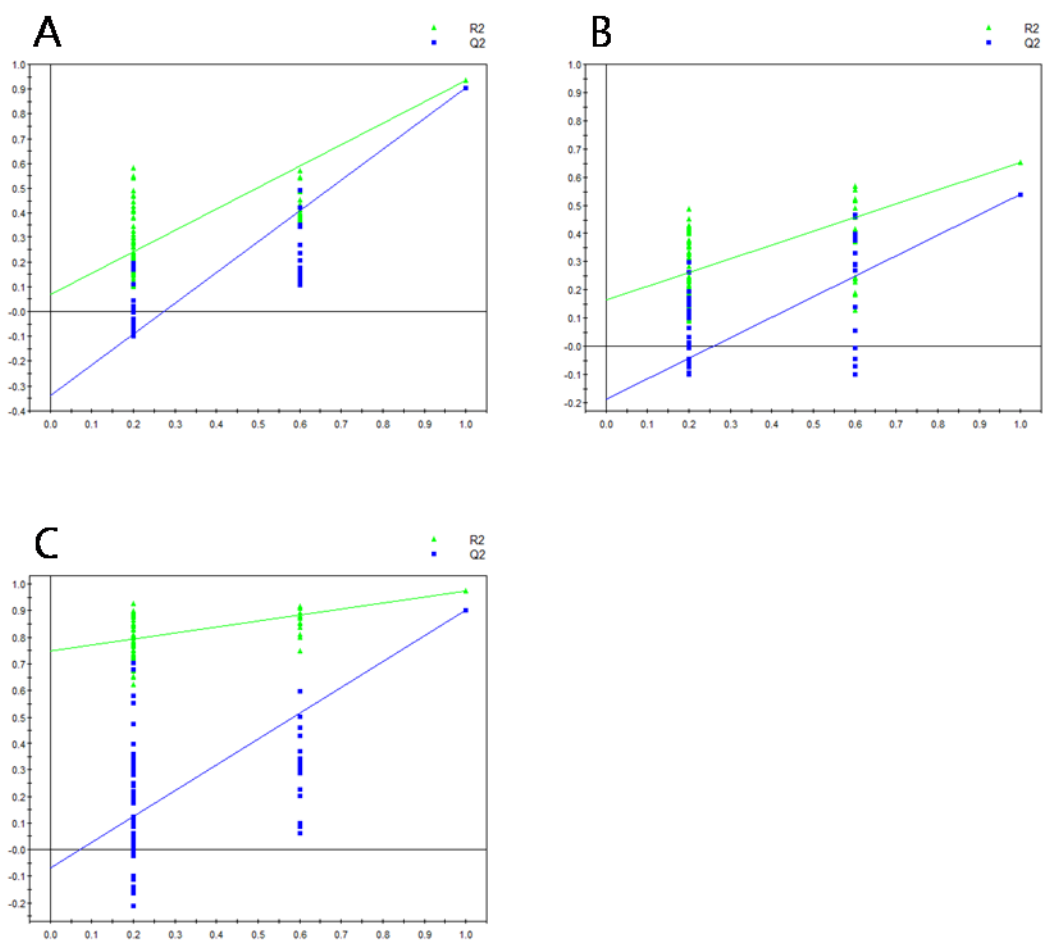


Figure S2. The permutation tests were carried out with 100 random permutations in PLS-DA models. A, aqueous fraction ( $Q^2_{\text{inter}} : -0.337$ ); B, lipid fraction ( $Q^2_{\text{inter}} : -0.186$ ) obtained from <sup>1</sup>H NMR spectra; C, nonpolar compounds ( $Q^2_{\text{inter}} : -0.066$ ) obtained from GC/MS spectra.