Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2014

## **Supplementary Information Figures**

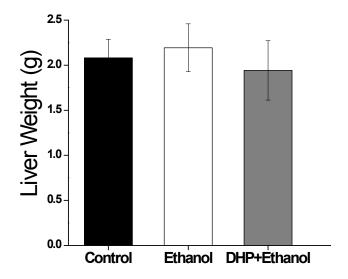
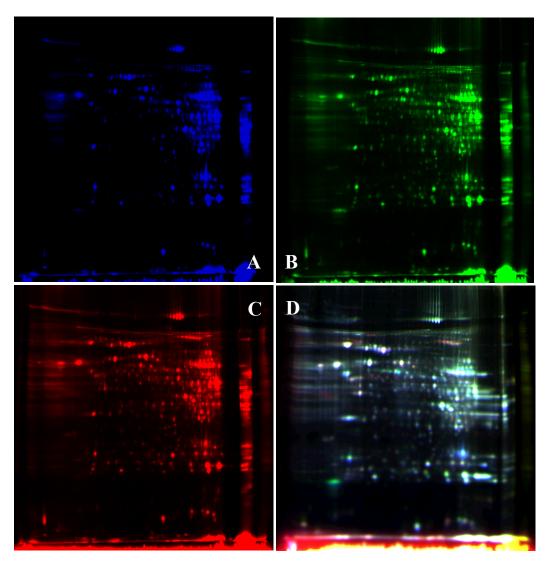
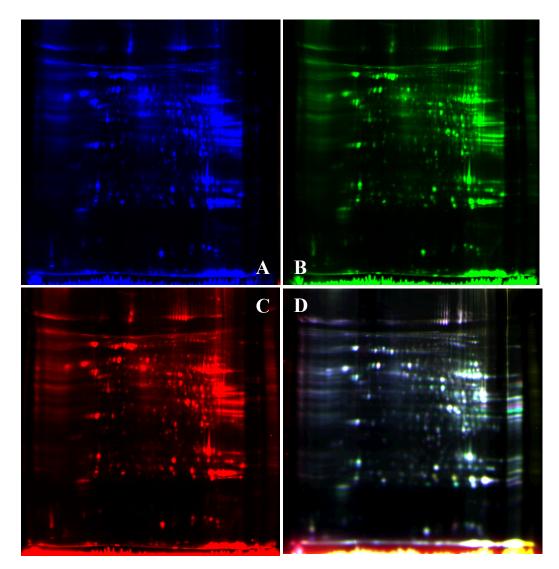


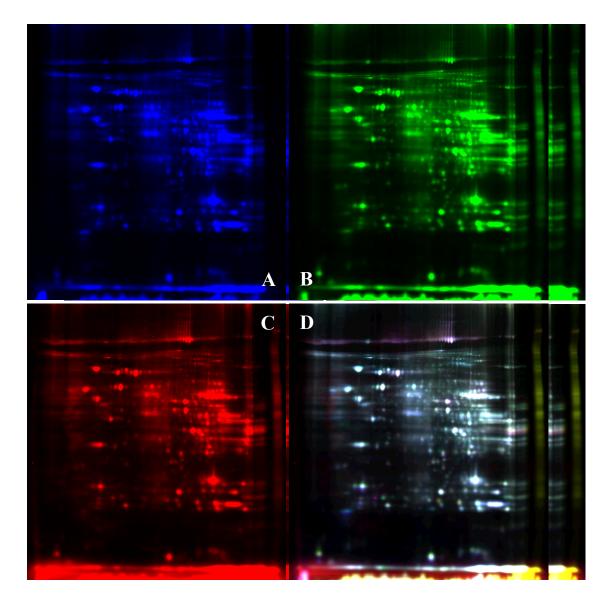
Fig S1. Effect of DHP on the liver weight of mice in different groups.



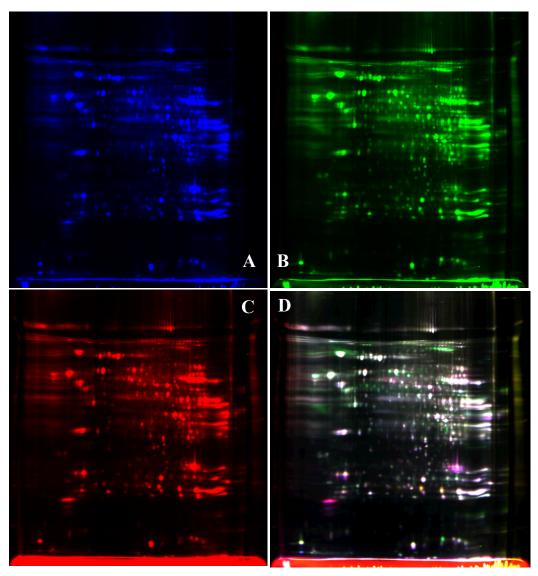
**Fig S2.** Liver tissue 2D-DIGE images of control group and ethanol group in gel1. (A) Image of internal standard sample labelled by Cy2; (B) Image of ethanol sample 1 labelled by Cy3; (C) Image of control sample 1 labelled by Cy5; (D) Overlapping image of Cy2, Cy3 and Cy5.



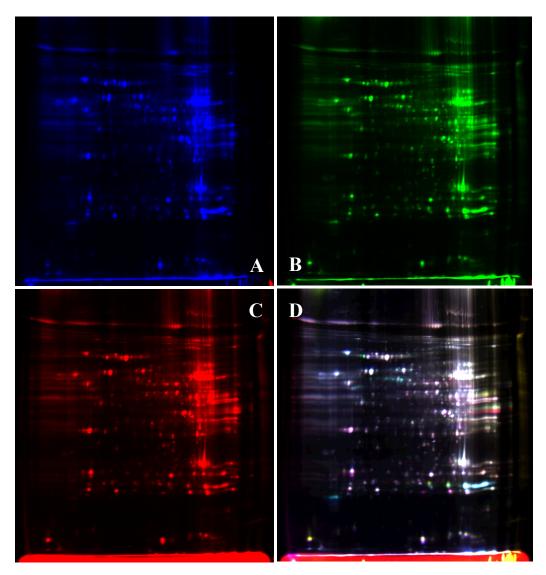
**Fig S3.** Liver tissue 2D-DIGE images of control group and DHP/ethanol group in gel2 ((A) Image of internal standard sample labelled by Cy2; (B) Image of control sample 2 labelled by Cy3; (C) Image of DHP/ethanol sample 1 labelled by Cy5; (D) Overlapping image of Cy2, Cy3 and Cy5.



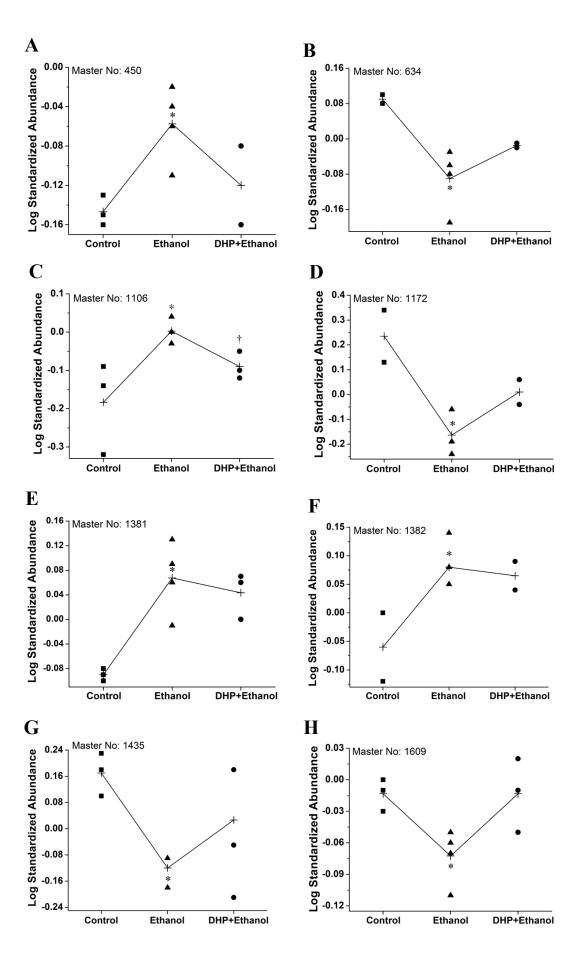
**Fig S4.** Liver tissue 2D-DIGE images of DHP/ethanol group and ethanol group in gel3 ((A) Image of internal standard sample labelled by Cy2; (B) Image of DHP/ethanol sample 2 labelled by Cy3; (C) Image of ethanol sample 2 labelled by Cy5; (D) Overlapping image of Cy2, Cy3 and Cy5.



**Fig S5.** Liver tissue 2D-DIGE images of control group and ethanol group in gel 4. (A) Image of internal standard sample labelled by Cy2; (B) Image of control sample3 labelled by Cy3; (C) Image of ethanol sample 1 labelled by Cy5; (D) Overlapping image of Cy2, Cy3 and Cy5.



**Fig S6.** Liver tissue 2D-DIGE images of DHP/ethanol group and ethanol group in gel5. (A) Image of internal standard sample labelled by Cy2; (B) Image of ethanol sample 3 labelled by Cy3; (C) Image of DHP/ethanol sample 3 labelled by Cy5; (D) Overlapping image of Cy2, Cy3 and Cy5.



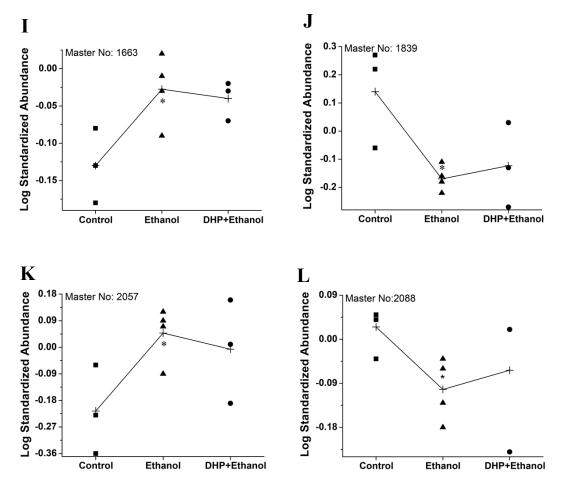
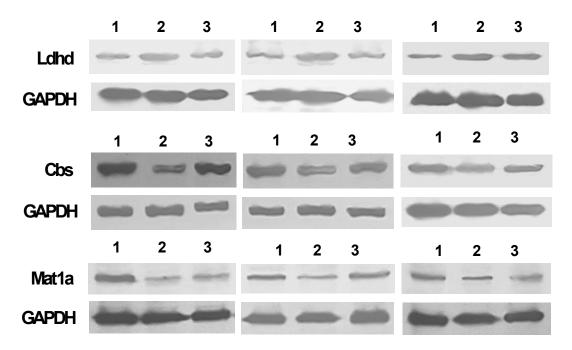


Fig S7. Standardized abundance changes of differentially expressed protein spots among control group ( $\blacksquare$ ), ethanol group( $\blacktriangle$ ) and DHP/ethanol group ( $\bullet$ ). A-L corresponding to protein spots: (A)450, (B)634, (C)1106, (D)1172, (E)1381, (F)1382, (G)1435, (H)1609, (I)1663, (J)1839, (K)2057, (L)2088. The graphs indicated that many differentially expressed proteins altered by ethanol exposure were regulated and tended towards normal level due to DHP supplementation, although many did not reached the statistically significant levels except spot 1106. \*p < 0.05 compared with Control group.



**Fig S8.** Confirmation of Ldhd, Cbs and Mat1a protein expression by western blot (n = 3). (Lane 1: Control group. Lane 2: Ethanol group. Lane 3: DHP/Ethanol group)