

Supplementary materials

Figure S1

The food intake of mice during the experiment. Record food intake twice a week.

Figure S2

Body weight, liver weight, fat weight, and glucose tolerance among NC, HFD, HFD+DSS, L-THL, and H-THL groups. (A) Body weight (B) Body weight increment (C) Liver weight (D) Fat weight (E) Blood glucose (F) Summed OGTT AUC

Figure S3

Comparison of lipid accumulation in liver and hepatic damage among NC, HFD, HFD+DSS, L-THL, and H-THL groups. (A) Oil Red O staining of liver sections at 200 times. (scale bar=100µm). (B) AST in serum. (C, D) LDL-c, HDL-c in serum. (E, F) TC, TG in the liver.

Figure S4

Comparison of colon injury among NC, HFD, HFD+DSS, L-THL, and H-THL groups. (A, B) The length of the colon. (C) H&E staining of colon sections at 100 times (scale bars=100µm). (E) Fluorescence image of Mucin2 at 200 times (scale bars=100µm) and 400 times (scale bars=50µm), the target protein was expressed as green fluorescence. (F) Fluorescence image of ZO-1 at 200 times (scale bars=100µm) and 400 times (scale bars=50µm), the target protein was expressed as green fluorescence.

Table S1. Information about the diet of mice

	Normal diet	Main source	High-fat diet	Main source
Contents	Energy(kcal/100g)		Energy(kcal/100g)	
Fat	36.4	Soybean oil	187.8	Lard, Soybean oil
Protein	77.1	Fish meal	67.2	Fish meal
Carbohydrate	211.3	Corn, wheat	213.6	Corn, wheat, sucrose

Figure S1

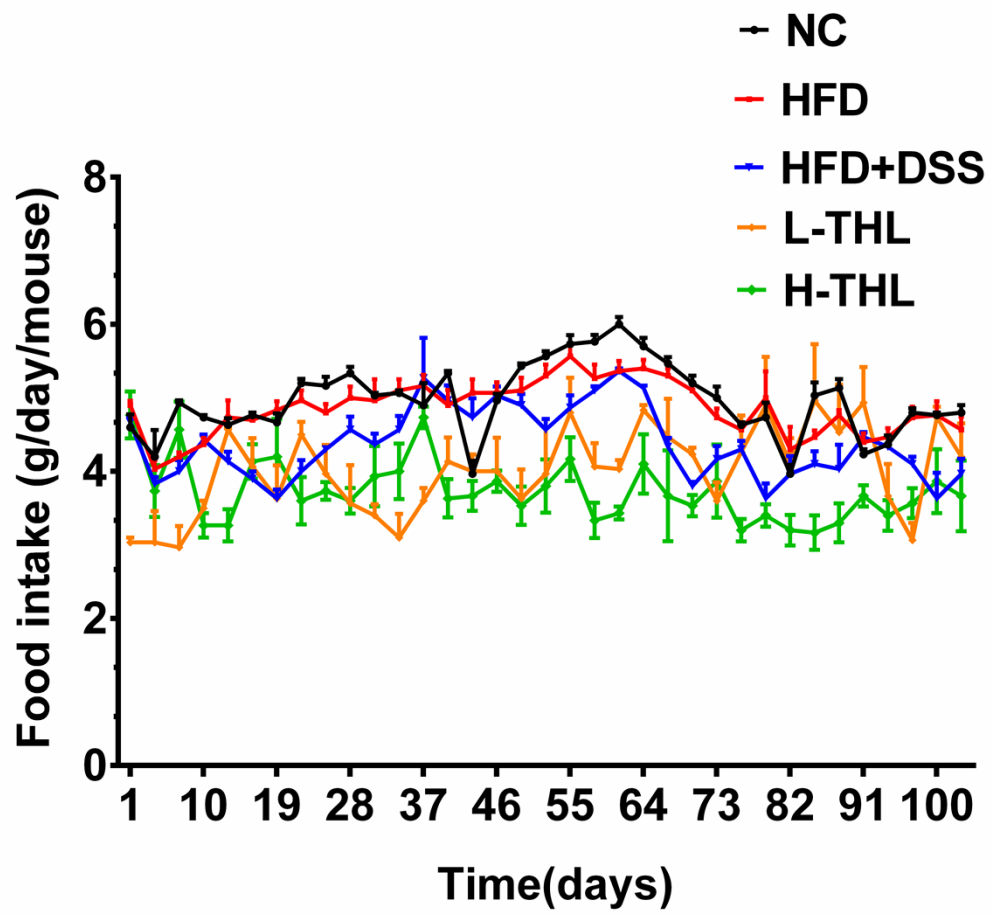
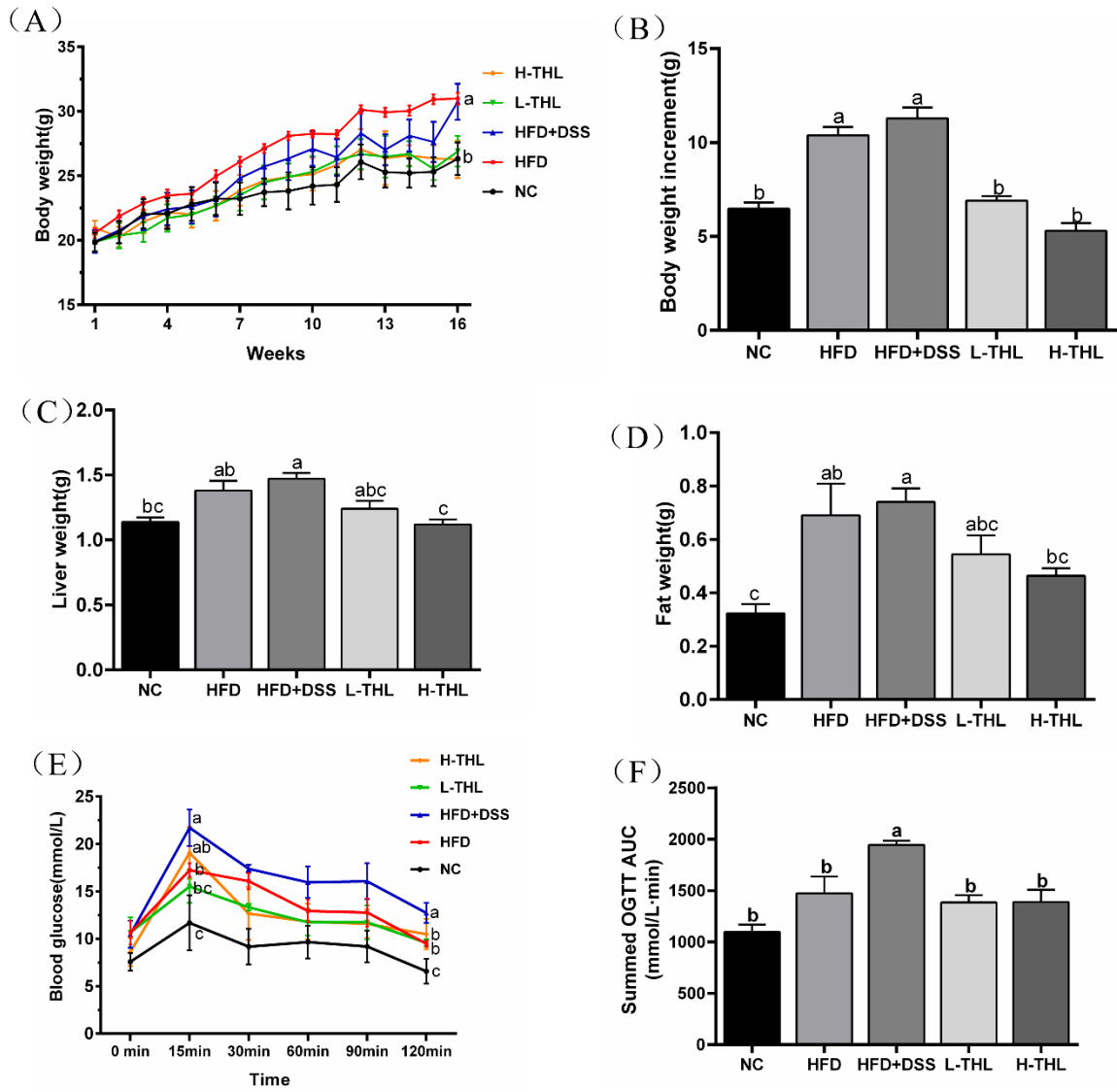
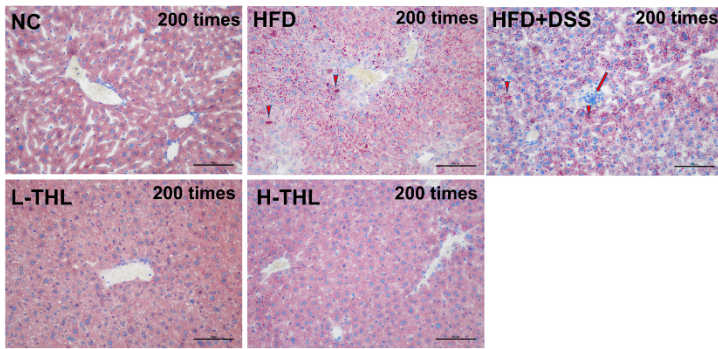


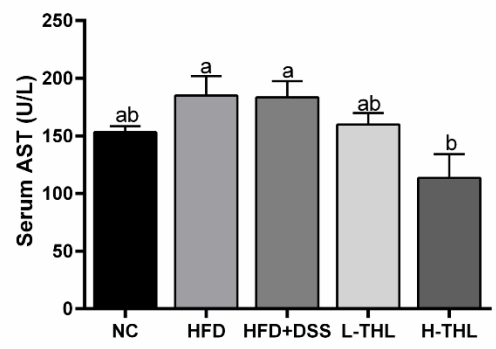
Figure S2



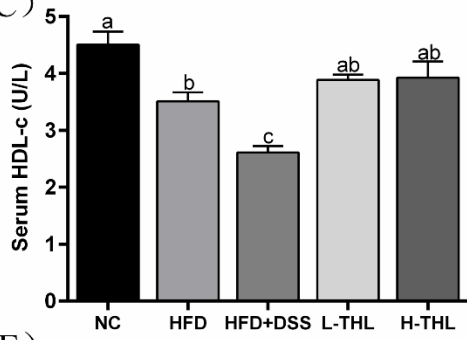
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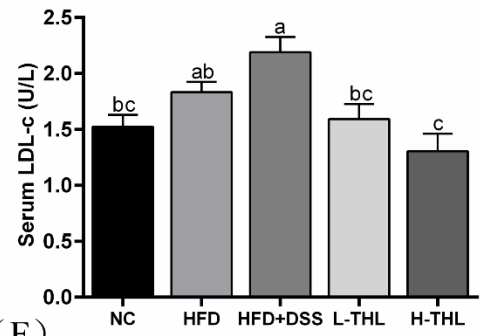
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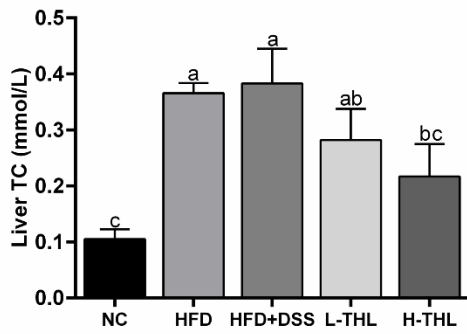
(C)



(D)



(E)



(F)

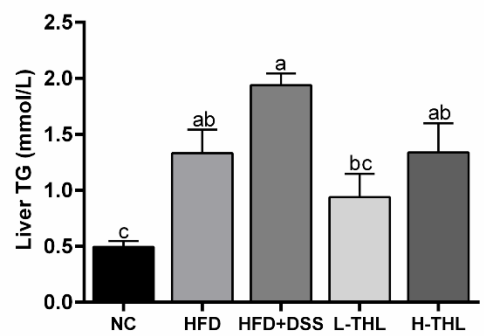


Figure S3

Figure S 4

