Electronic Supplementary Material (ESI) for Food & Function.

Figure. S1

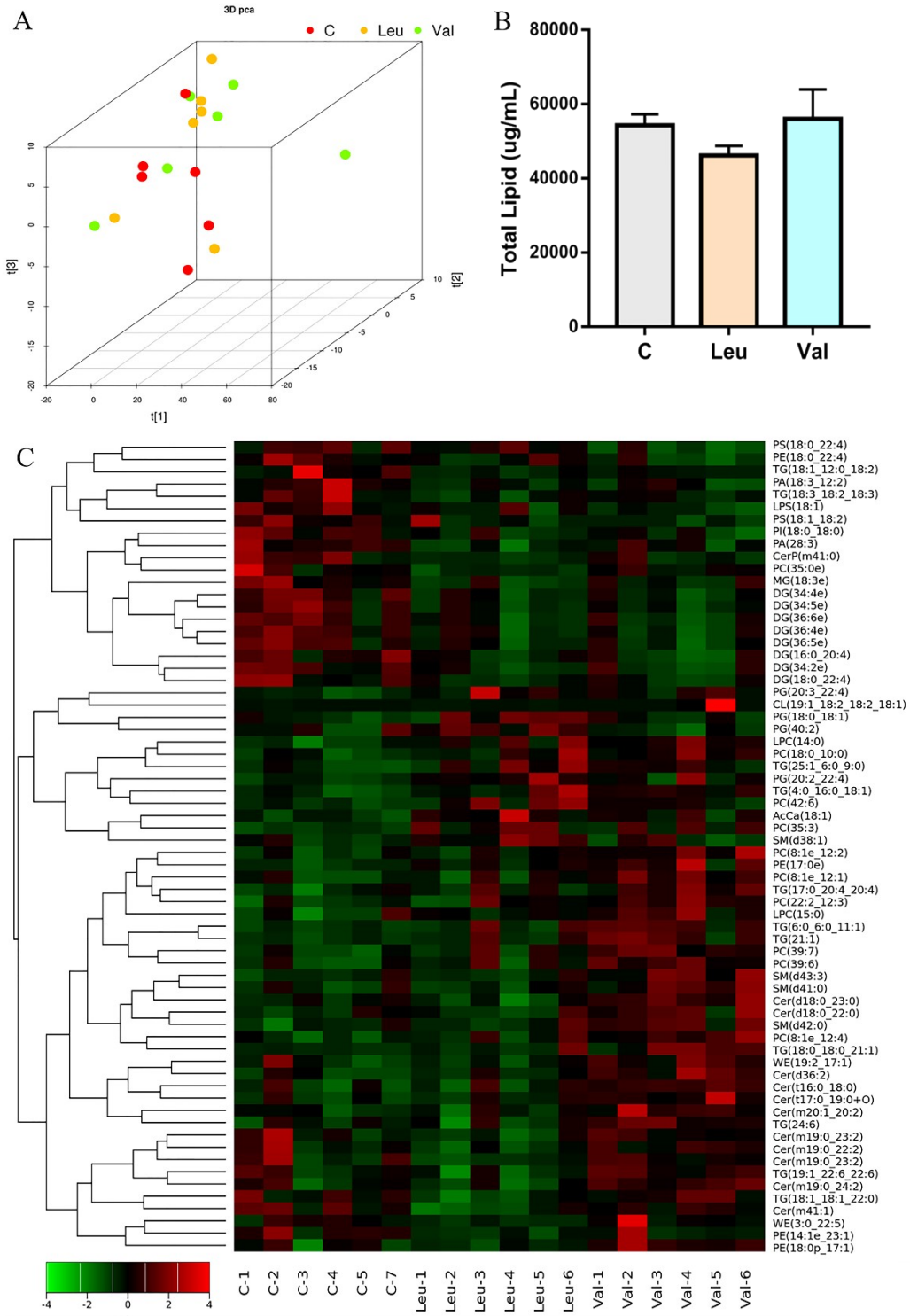

Fig. S1 Hepatic lipidomics analysis. The pigs were supplemented with 0.076 mol/kg Leu, Ile, and Val respectively in the diet to investigate the effects. (n = 6 pigs per group). (A) PCA of each group. (B) Total lipid concentration. (C) Heatmap of metabolites. Leu, leucine; Val, valine; Data are presented as mean ± SEM.

Figure. S2

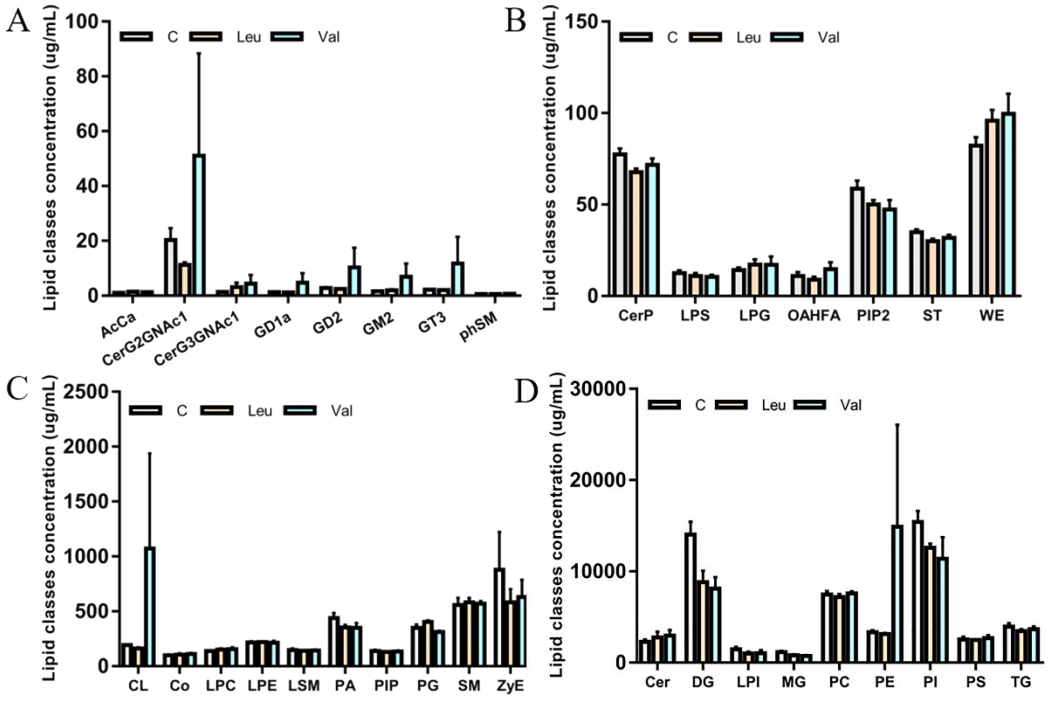

Fig. S2 The concentration of different lipid classes. The pigs were supplemented with 0.076 mol/kg Leu, Ile, and Val respectively in the diet to investigate the effects. (n = 6 pigs per group). Leu, leucine; Val, valine; Data are presented as mean ± SEM.

Figure. S3

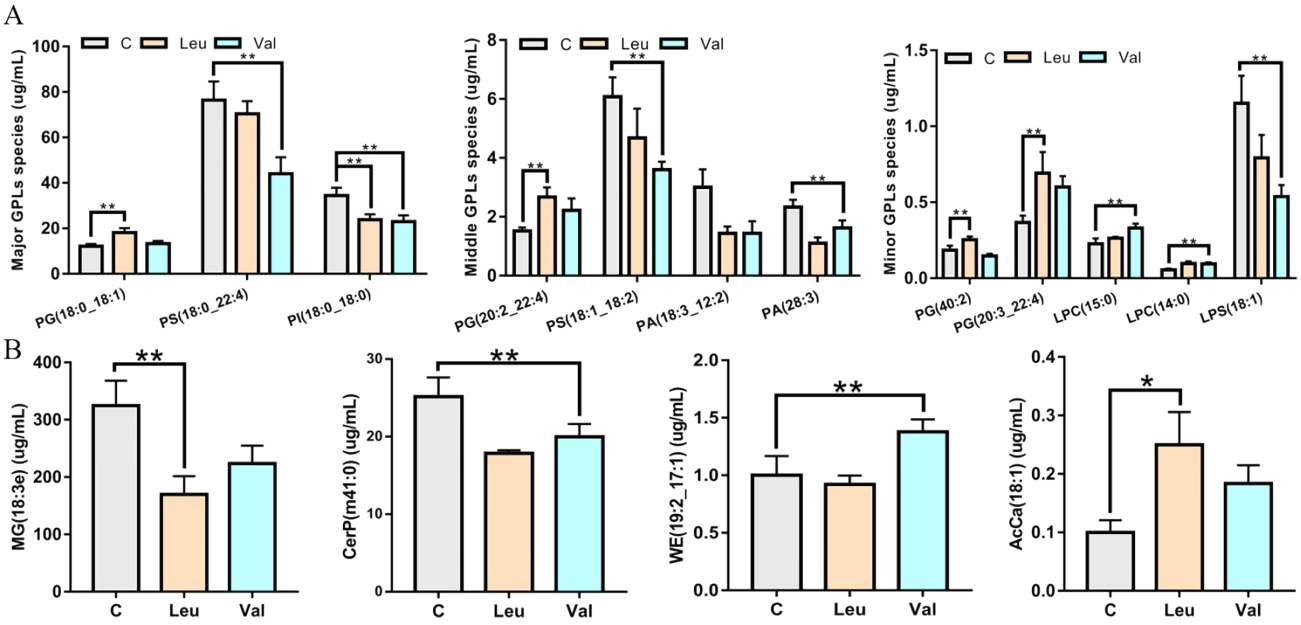

Fig. S3 The concentration of glycerophospholipids and other species was affected by Leu and Val. The pigs were supplemented with 0.076 mol/kg Leu, Ile, and Val respectively in the diet to investigate the effects. (n = 6 pigs per group). (A) Concentration of significant changed other glycerophospholipids species. (B) Concentration of significant changed other species. Leu, leucine; Val, valine; PE, phosphatidylethanolamine; GLPs, glycerophospholipids; PG, phosphatidylglycerol; PA, phosphatidic acid; PS, phosphatidylserine; PI, phosphatidylinositol; LPC, lysophosphatidylcholine; LPS, lysophosphatidylserine. Data are presented as mean ± SEM. *p < 0.05 versus C group, **p < 0.01 versus C group.

Figure. S4

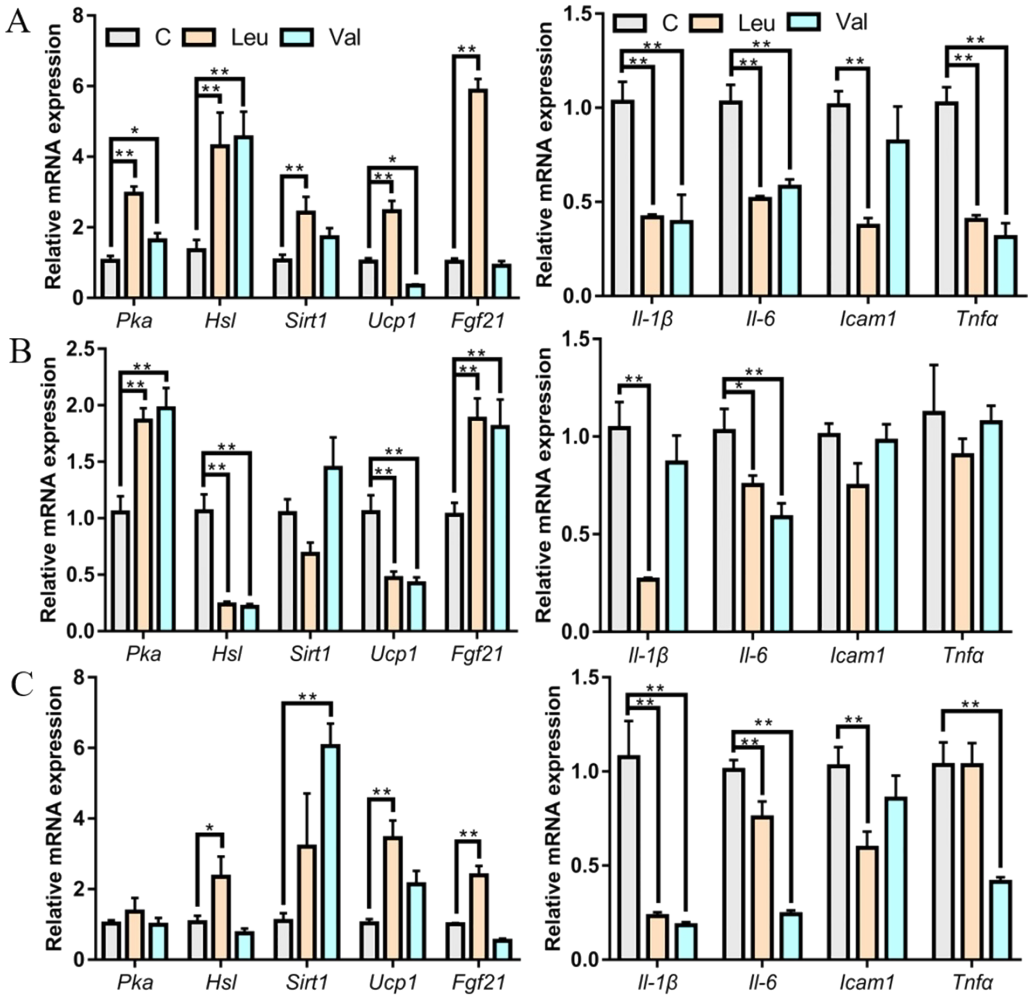

Fig. S4 The genes related to lipid metabolism and inflammation were altered by Leu and Val in different adipose tissue. The pigs were supplemented with 0.076 mol/kg Leu, Ile, and Val respectively in the diet to investigate the effects. (n = 6 pigs per group). (A) Relative mRNA expression related to lipid metabolism and inflammation in back fat. (B) Relative mRNA expression related to lipid metabolism and inflammation in abdominal fat. (C) Relative mRNA expression related to lipid metabolism and inflammation in perirenal fat. Leu, leucine; Val, valine; *Pka*, protein kinase A; *Hsl*, hormone-sensitive triglyceride lipase; *Sirt1*, sirtuin 1; *Ucp1*, uncoupling protein 1; *Fgf21*, fibroblast growth factor 21; *Il-1β*, interleukin 1 beta; *Il-6*, interleukin 6; *Icam1*, intercellular adhesion molecule 1; *Tnfα*, tumor necrosis factor α. Data are presented as mean ± SEM. *$p < 0.05$ versus C group, **$p < 0.01$ versus C group.