Supplementary Information (SI) for Food & Function. This journal is © The Royal Society of Chemistry 2025

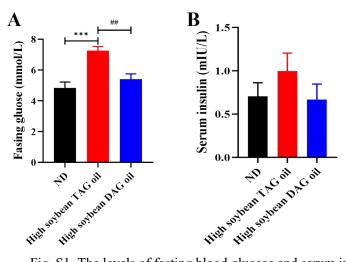


Fig. S1. The levels of fasting blood glucose and serum insulin, related to Fig. 2. (A) Fasting glucose level; (B) Serum insulin level. Data were presented as mean \pm SEM, ***p<0.001 versus the ND group, ##p<0.01 versus the High soybean TAG oil group.

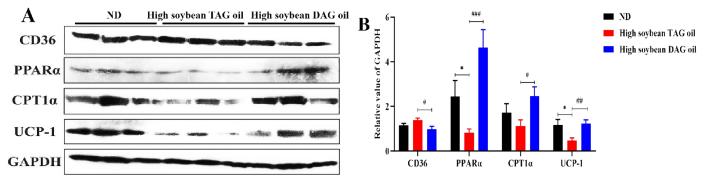
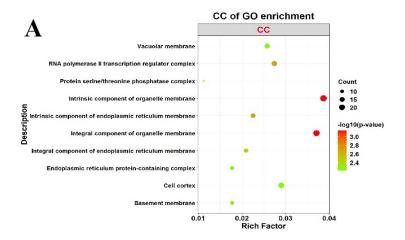
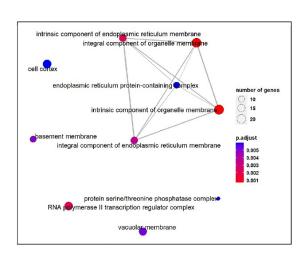


Fig. S2. The expression levels of hepatic proteins involving in lipid transport and fatty acid oxidation, related to Fig. 2. (A) Western blot (n=3) and (B) quantification (n=6) of total protein levels of CD36, PPAR α , CPT1 α and UCP-1 in mouse liver. Data were presented as mean \pm SEM, *p<0.05 versus the ND group, #p<0.05, ##p<0.01 and ###p<0.001 versus the High soybean TAG oil group.





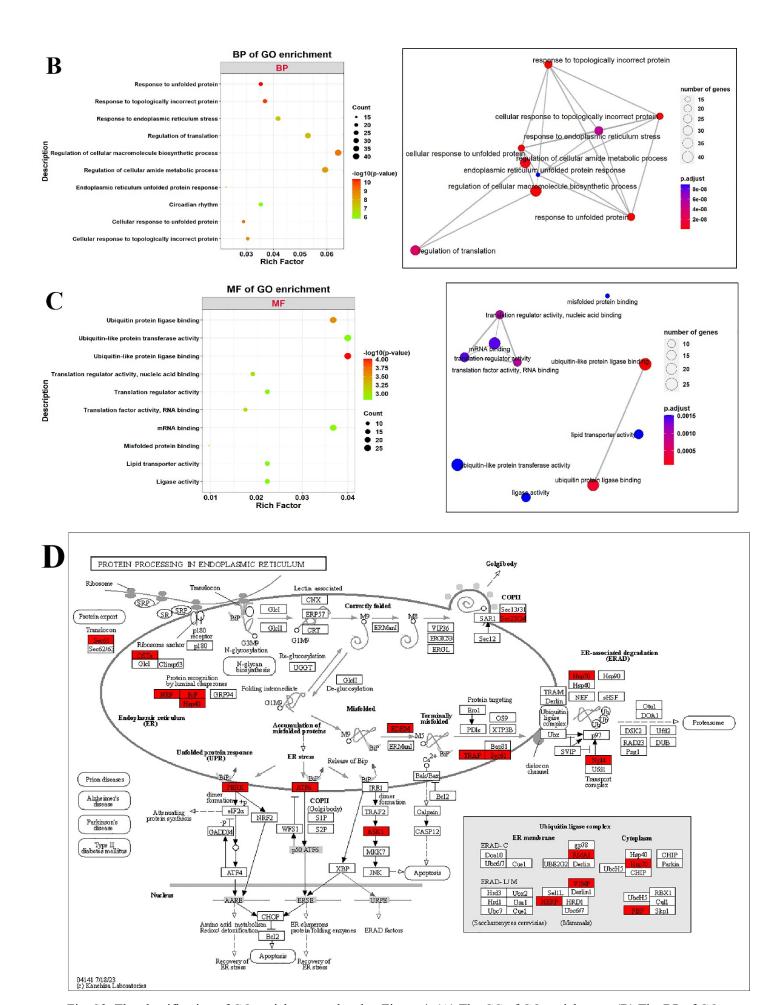


Fig. S3. The classification of GO enrichment, related to Figure 4. (A) The CC of GO enrichment; (B) The BP of GO enrichment; (C) The MF of GO enrichment; (D) The pathway of protein process in ER (Red represent a significant increase in High soybean DAG oil group vs High soybean TAG oil group). Data was presented in High soybean DAG oil group vs High soybean TAG oil group.