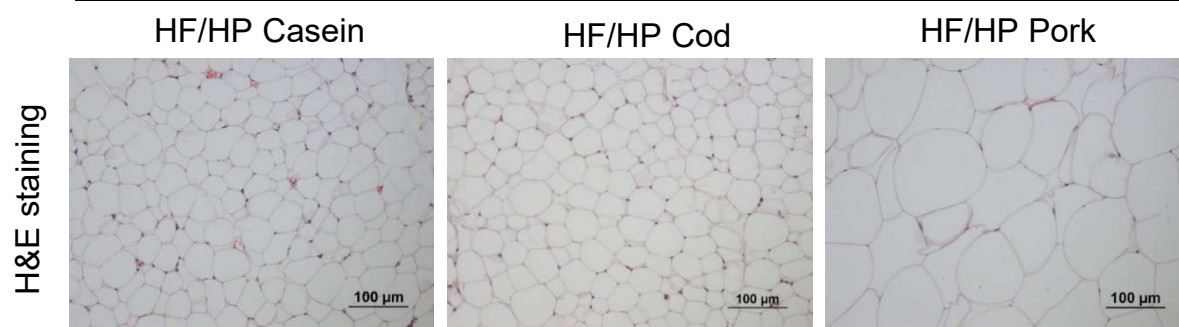
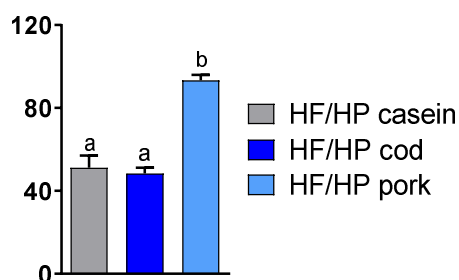


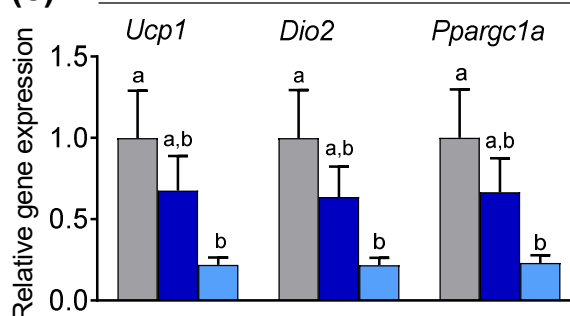
(a) iWAT



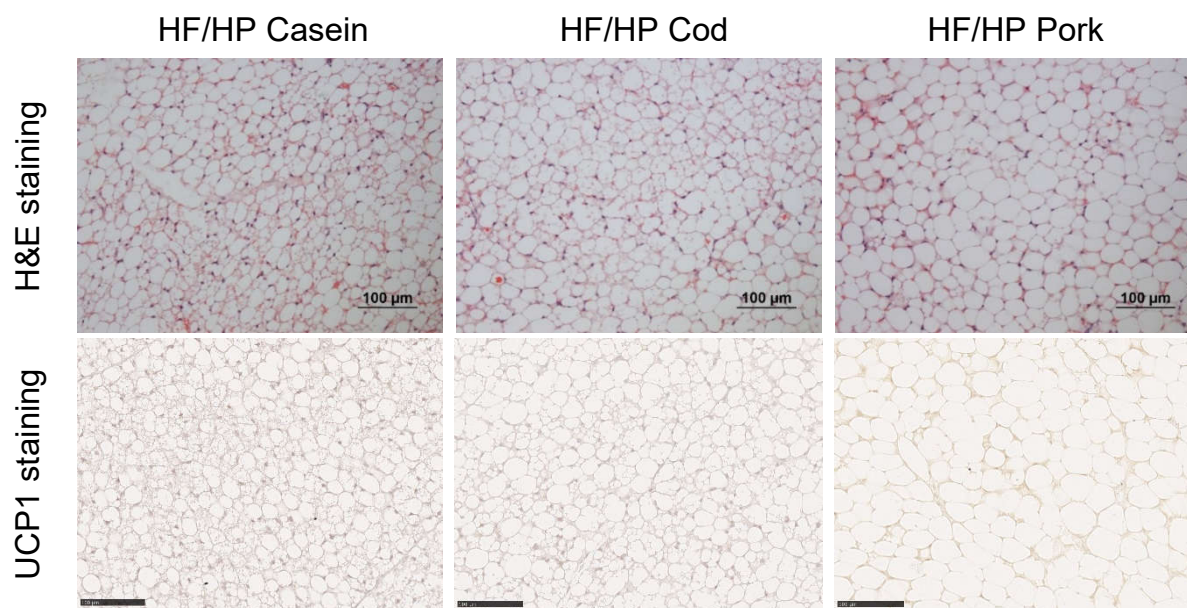
(b) Mean cell diameter, iWAT (µM)



(c) Browning (iWAT)



(d) iBAT



(e) UCP1 quantification (%area)

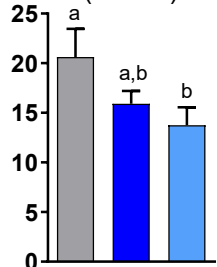


Figure S1. (a) Hematoxylin and eosin (H&E) staining of inguinal white adipose tissue (iWAT) after 12 weeks of feeding *ad libitum* high-fat/high-protein (HF/HP) diets based on different protein sources to lean mice (scalebar = 100µm). (b) Mean cell diameter ± SEM of adipocytes from iWAT (n=4). (c) Expression levels of the brown adipose tissue marker genes Uncoupling protein 1 (*Ucp1*), Deiodinase iodothyronine type II (*Dio2*), Peroxisome proliferator-activated receptor-g coactivator 1a (*Ppargc1a*) in iWAT (n=5-7). Expression levels are normalized to the gene expression of TATA-box binding protein (*TBP*). (d) H&E staining of interscapular brown adipose tissue (iBAT) after 12 weeks of feeding *ad libitum* HF/HP diets based on different protein sources to lean mice (scalebar = 100µm). (e) Immunohistochemical staining with UCP1-antibody and (f) quantification of per cent area stained with UCP1-antibody demonstrated as mean ± SEM (n=3-5). Different letters denote significant differences (P<0.05) by one-way ANOVA using uncorrected Fisher's LSD multiple comparison.