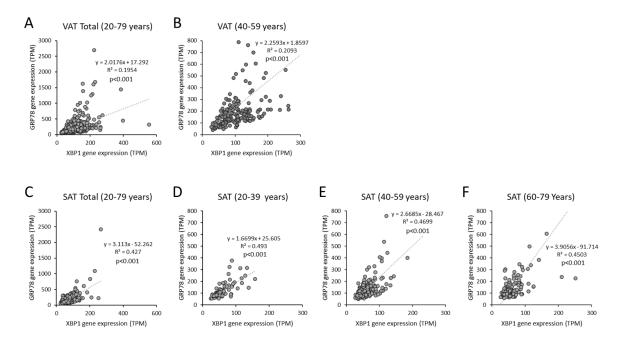
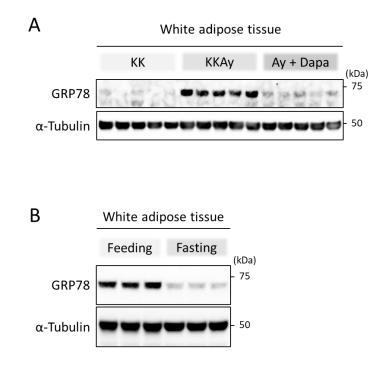


Supplemental Figure 1. Data related to Figure 2 and Figure 3. A: GRP78 gene expression in human visceral and subcutaneous adipose tissue in the indicated age groups; GTEx, 20-39 years of age: n=53 (VAT) and n=70 (SAT), 40-69 years of age: n=290 (VAT) and n=359 (SAT), 70-79 years of age: n=12 (VAT) and n=13 (SAT). B: GRP78 gene expression in the human

- 5 70-79 years of age: n=12 (VAT) and n=13 (SAT). B: GRP78 gene expression in the human visceral and subcutaneous adipose tissue of male and female subjects; GTEx, total: n=526 (male) and n=271 (female), VAT: n=241 (male) and n=114 (female), SAT: n=285 (male) and n=157 (female). C: Western blot image and densitometry of GRP78 in 3T3-L1 adipocytes treated with the indicated glucose concentrations and insulin for 48 hours; 5.5 mM (99)
- mg/dl), 15.25 mM (274.5 mg/dl), 25 mM (450 mg/dl), 25 mM (450 mg/dl) + insulin (10 nM).
 Data are mean ± SEM. *p < 0.05, **p < 0.01.



Supplemental Figure 2. Data related to Figure 3G and 3H. A-F: Correlation between GRP78 and XBP-1 gene expression in human visceral (total n=355) and subcutaneous (total n=442) adipose tissue in the indicated age groups; GTEx, 20-39 years of age: n=70 (SAT), 40-59 years of age: n=181 (VAT) and n=223 (SAT), 60-79 years of age: n=149 (SAT) ; visualized GRP78 expression ranging from 0 to 800 TPM, XBP1 from 0 to 300 TPM.



Supplemental Figure 3. Data related to Figure 4C and 4G. A: C: Western blot image of GRP78 protein in mouse visceral adipose tissue after 5 weeks of SGLT2 inhibitor (SGLT2i: dapagliflozin) treatment (each n=5). B: Western blot image of GRP78 protein in mouse visceral adipose tissue of 24 hours feeding after 24 hours of fasting (each n=3).