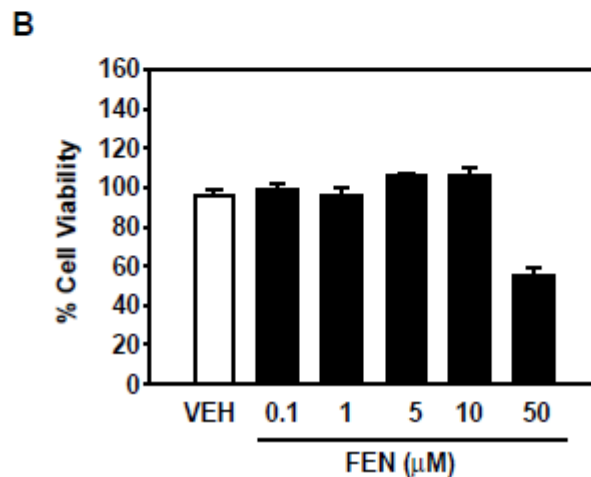
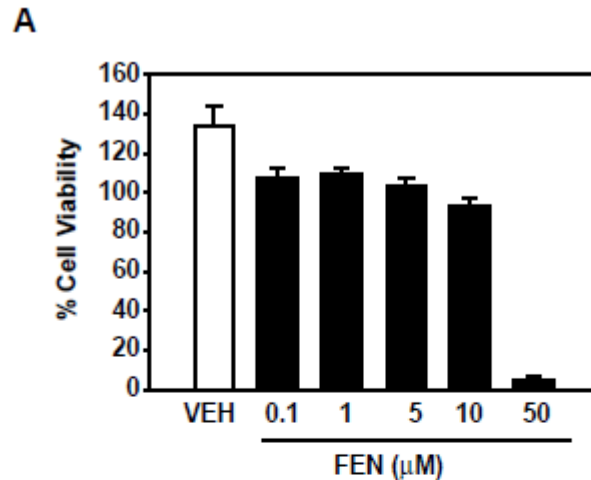


## SUPPLEMENTARY DATA

**Supplementary Figure 1.** Fenretinide does not affect cell viability at therapeutic concentrations used. A: FEN dose response in differentiating 3T3-L1 adipocytes as per main text Fig.1. B: FEN dose response in fully differentiated 3T3-L1 adipocytes as per main text Fig.2. Cell cultures were tested for cell viability using the Resazurin assay as per manufacturer's protocol. Briefly, media was aspirated in triplicate from samples and readings taken using a spectrophotometer at 570nm with correction at 600nm. Basal readings were taken prior to treatment supplementation and the Resazurin assay repeated 48 hours after the addition of compounds. Results were normalised to basal readings in order to determine a percentage of cell viability.



SUPPLEMENTARY DATA

**Supplementary Figure 2.** Insulin-stimulated signaling *in vivo*. Mice were fasted overnight, injected intraperitoneally with 10mU/g insulin or saline for 10 mins and tissues dissected. Phosphorylation of insulin receptor, Akt/PKB, S6 and ERK1 in gastrocnemius muscle were determined by immunoblotting and signal quantified. Adipose tissue signaling is shown in main text Fig. 3F. (CHOW, clear bar, n=4, HF, black bar or FEN-HF, gray bar, n=8 mice). T-test was used to calculate significant difference for p-S6 FEN vs HF. Otherwise significance was calculated by ANOVA.

