400mg/kg diet) and NQO1 gene expression (p=0.005 at 100mg/kg diet, p=0.03 at 200mg/kg diet, p=0.005 at 400mg/kg diet) were significantly increased in CDDO-TFEA treated mice.

Supplementary figure 1: Levels of CDDO analogues in brain of wildtype mice after feeding.

(A) Chemical structures of CDDO analogues. (B) Comparison of CDDO-MA and CDDO-EA brain levels after feeding at 800mg/kg diet for 2 days. (C) Comparison of CDDO-EA and CDDO-TFEA brain levels after feeding at 200mg/kg diet and 400mg/kg diet for 3 days. Data were expressed as means and standard errors. In wildtype mice, brain levels of CDDO-EA were higher than CDDO-MA, and brain levels of CDDO-TFEA were higher than CDDO-EA.

Supplementary figure 2: Chromatograms of standard levels of CDDO-ethyl amide (CDDO-EA) and CDDO-trifluoroethyl amide (CDDO-TFEA) in N171-82Q mice.

Chromatograms of standard dilution series for (A) CDDO-EA and (B) CDDO-TFEA added to mouse tissue homogenates at various concentrations. Areas under the curve increase with increasing concentrations.

Supplementary figure 3: Levels of CDDO-ethyl amide (CDDO-EA) in the brain of N171-82Q mice.

Chromatograms of (A) CDDO-EA at 100mg/kg diet and (B) at 200mg/kg diet in N171-82Q mouse brain.

Supplementary figure 4: Levels of CDDO-ethyl amide (CDDO-EA) in the skeletal muscle of N171-82Q mice.

Chromatograms of (A) CDDO-EA at 100mg/kg diet and (B) at 200mg/kg diet in N171-82Q mouse muscle. (C) Levels of CDDO-EA in the muscle of N171-82Q mice. Data were expressed as means and standard errors.

Supplementary figure 5: Levels of CDDO- trifluoroethyl amide (CDDO-TFEA) in the brain of N171-82Q mice.

Chromatograms of (A) CDDO-TFEA at 100mg/kg diet and (B) at 200mg/kg diet, and (C) at 400mg/kg diet in N171-82Q mouse brain. (D) Levels of CDDO-TFEA in the brain of N171-82Q mice. Data were expressed as means and standard errors.

Supplementary figure 6: Levels of CDDO-trifluoroethyl amide (CDDO-TFEA) in the skeletal muscle of N171-82Q mice.

Chromatograms of (A) CDDO-TFEA at 100mg/kg diet and (B) at 200mg/kg diet, and (C) at 400mg/kg diet in N171-82Q mouse muscle. (D) Levels of CDDO-TFEA in the muscle of N171-82Q mice. Data were expressed as means and standard errors.

Supplementary figure 7: CDDO-ethyl amide (CDDO-EA) and CDDO-trifluoroethyl amide (CDDO-TFEA) did not affect food intake in N171-82Q mice.

Body weights of N171-82Q mice fed with CDDO-EA (A for males and B for females) and CDDO-TFEA diets (C for males and D for females). Data were expressed as means

and standard errors. CDDO-EA and CDDO-TFEA did not affect food intake in N171-82Q mice.