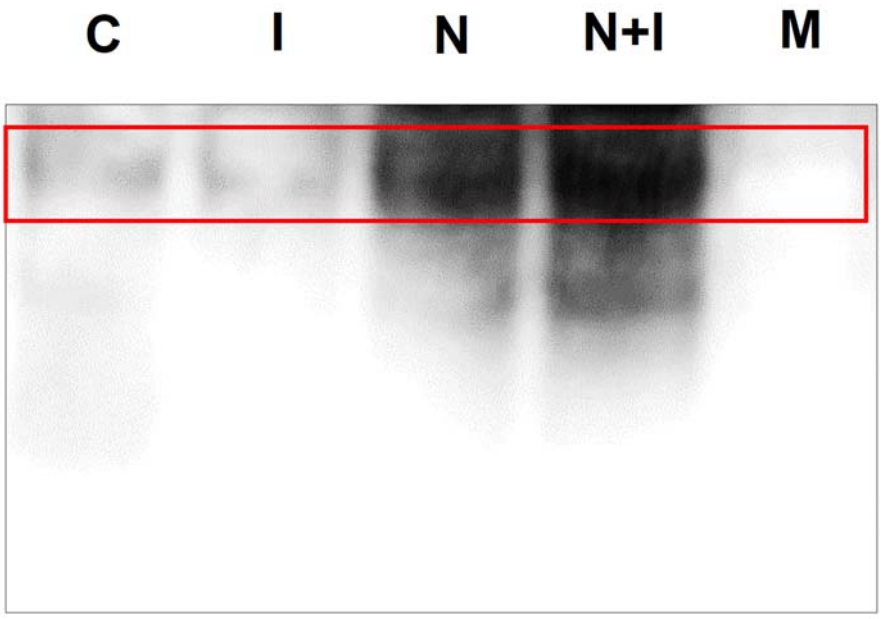
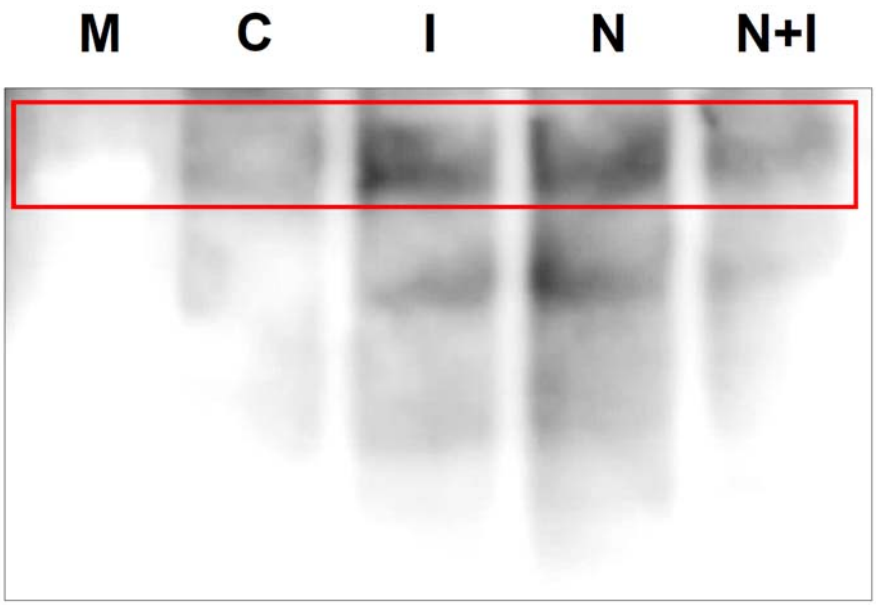
SUPPLEMENTARY DATA

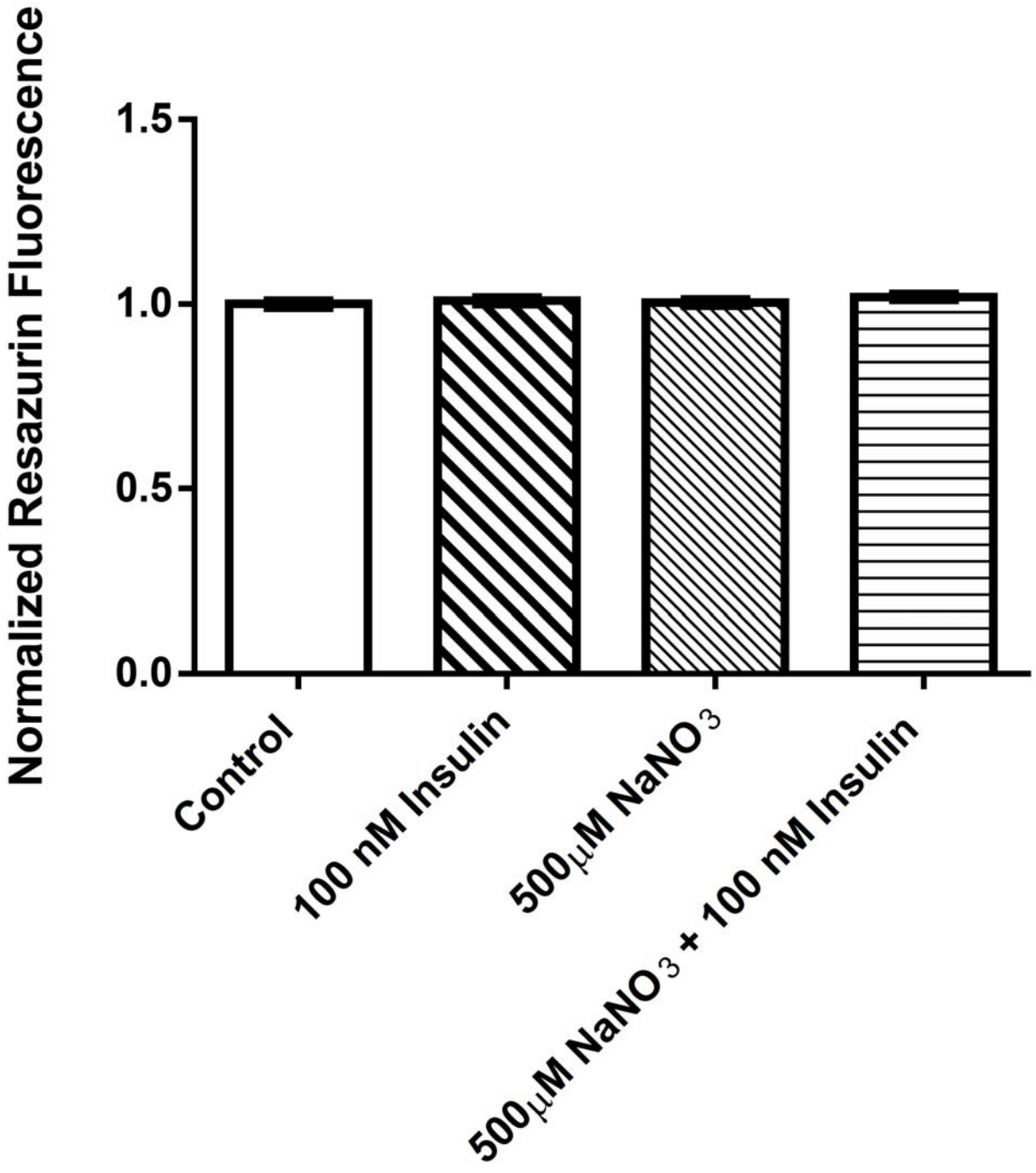
Supplementary Figure 1. Immunoprecipitation blots of cell surface biotinylated Glut4 from primary mouse adipocytes treated with 500 μM nitrate with and without 100 nM insulin showing 50 kDa molecular weight marker. C = control, I = 100 nM insulin, N = 500 μM nitrate, N+I = 500 μM nitrate + 100 nM insulin, M = 50 kDa molecular weight marker.





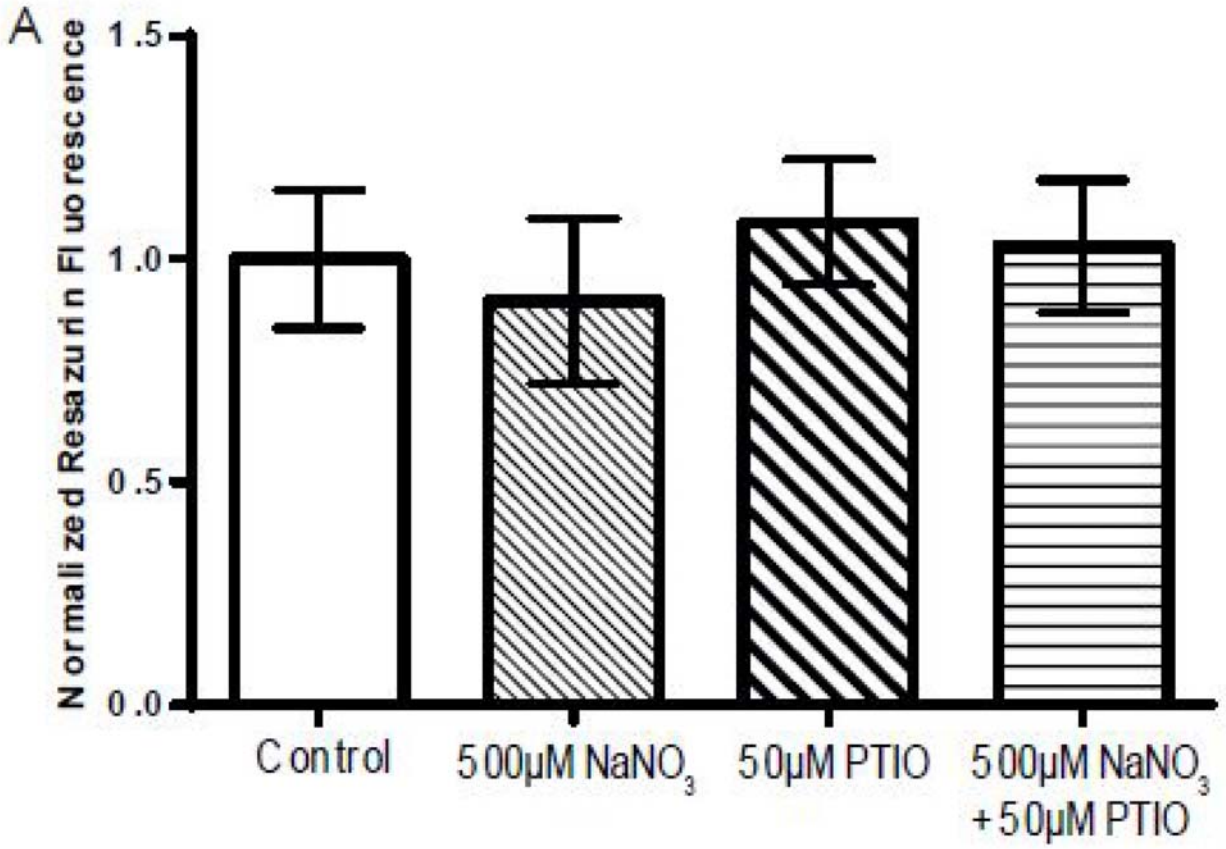
SUPPLEMENTARY DATA

Supplementary Figure 2. Resazurin cell viability assay in primary adipocytes treated with 500 μM nitrate, 100 nM insulin, or 500 μM nitrate and 100 nM insulin ($n \geq 22$). Data is displayed as Mean ± SEM.



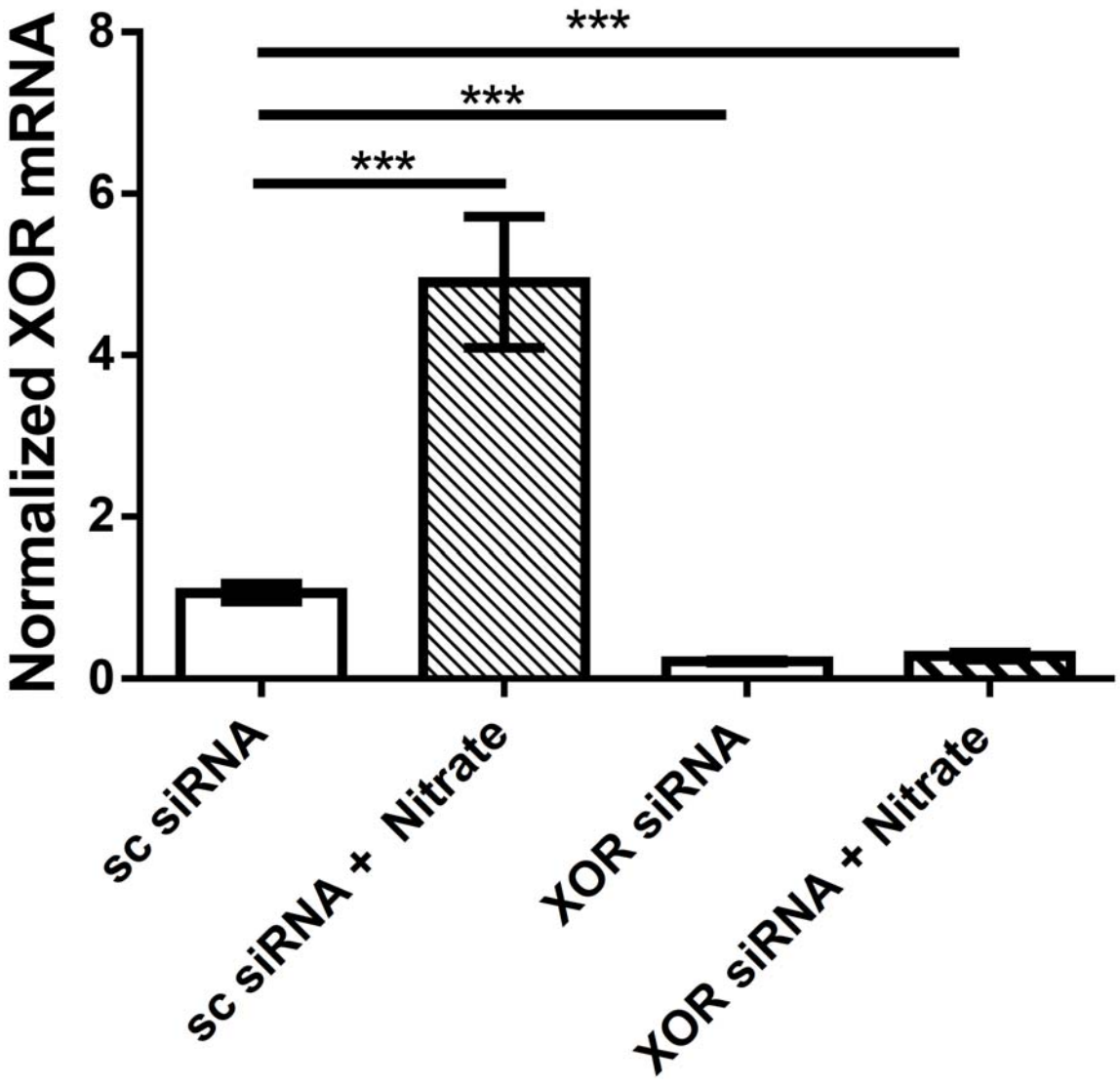
SUPPLEMENTARY DATA

Supplementary Figure 3. Resazurin cell viability assay in primary adipocytes treated with 500 μM nitrate, 50 μM PTIO, or 500 μM nitrate and 50 μM PTIO (n = 8). Data is displayed as Mean ± SEM.



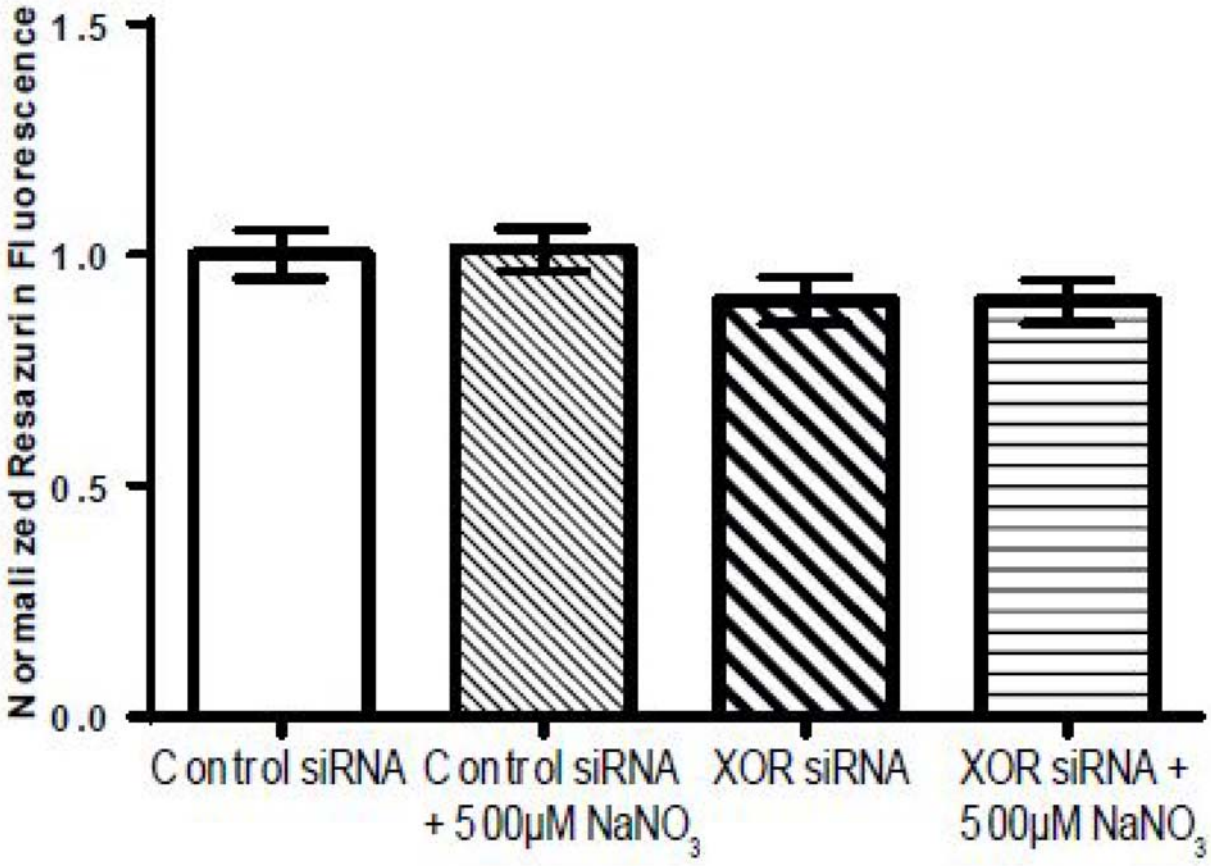
SUPPLEMENTARY DATA

Supplementary Figure 4. Xanthine Oxidoreductase (XOR) expression in primary adipocytes treated with scrambled control siRNA or siRNA against XOR with and without 500 μM nitrate (n = 3). Data is displayed as Mean ± SEM. ***, $P \leq 0.001$.



SUPPLEMENTARY DATA

Supplementary Figure 5. Resazurin cell viability assay in primary adipocytes treated with negative control siRNA or siRNA against XOR with and without 500 μM $NaNO_3$ (n = 6). Data is displayed as Mean ± SEM.



SUPPLEMENTARY DATA

Supplementary Table 1. Table of morphological parameters of rats treated with 0.7 mM NaCl or 0.7 mM $NaNO_3$ in drinking water for 18 days. Table detailing start and final weights, food and water intakes, daily nitrate intake, and plasma insulin concentration. Data were analysed by Student's t-test and are Mean ± SEM. *** $P \leq 0.0001$.

	0.7 mM NaCl (*n* = 6)	**0.7 mM $NaNO_3$ (*n* = 6)**
Start weight (g)	265 ± 5	270 ± 4
End weight (g)	406 ± 8	415 ± 9
Food intake (g/day)	30 ± 1	30 ± 1
Water intake (mL/day)	30 ± 3	36 ± 3
Nitrate intake (mg/kg/day)	1 ± 1	8 ± 2 ***
Plasma Insulin (µg / L)	1.18 ± 0.2	1.16 ± 0.3