Electronic Supplementary Material (ESI) for Food & Function.

Supplemental Materials

Table S1. Animal groups

Groups	Number	Additive	Concentration
Group 1 (Con)	20	-	-
Group 2 (Resv)	20	Resverotrol	400 mg/kg
Group 3 (Cd140)	20	Cd	140 mg/kg
Group 4 (Cd+Resv)	20	Cd+Resverotrol	140 mg/kg Cd+400 mg/kg Resveratrol

Table S2. Sequences of oligonucleotide primers for qRT-PCR.

Gene Names	Sequence(5' → 3')	NCBI Reference Sequence	Amplicon size (bp)
β-actin 1	AGTACCCCATTGAACACGGC CTCCTCAGGGGCTACTCTCA	AF199488	98
β-actin 2	CATCAGGGTGTGATGGTTGGT GGGGTACTTCAGGGTCAGGA	AF199488	93
CYP1A1	TTGCGTGTTTATCAACCAGT CTTTGTTCACTTCGGTCCCTT	NM_205146.2	113
CYP1A4	ATGCTCGTTTCAGTGCCTTCGT GTGTCAAAGCCTGCCCCAA	NM_205147.1	199
CYP1A5	CTATGACAAGAACAGCATCCGAGACT CCCCAAAGATGTCATTCACC	NM_001323211.1	138
CYP1B1	TTACCTCCATTCTCGTGCAT CAGCCTTATCAAGCAACTCCA	XM_419515.4	150
CYP2C18	AACCTCCATACGAAGCTGCAA TGTGCCTTTGAAGACTTTCTCA	XM_004942105.1	243
CYP2D6	GGCGTTCCTGTTCATGCTTT TCGGTTTCTTCCAATCACCT	NM_001195557.1	82
CYP3A4	TCATAGTGTTGTTCCCCTT GGTATCCTTCTTCCCGTTC	XM_414782.4	129
CYP3A5	AGCCTGCGGTTGTTGTCATG CTTCAGCTAATGAGACAGCGTTTC	NM_001001751.2	132
CYP3A9	ATGCTCGTTTCAGTGCCTTCGT GTGTCAAAGCCTGCCCCAA	NM_205147.1	199
CAR	ACTTCACCTGCCCCTTTGCC CCTTCCTCATCCCCACGTCCA	AB104462.1	105
PXR	CCCTCAAGAGCTACACATCGACCA TGTTCTCCATCTTCAGCGTCT	EU153259.1	108
AHR	TTCAGGAAAGCAGAACAGCAA TCACAACTAATACGAAGCCAT	NM_204118.2	96
SOD1	TGTGCATGAATTTGGAGACAAC TTGCAGTCACATTGCCGAG	NM_205064.1	131
SOD2	TGCACTGAAATTCAATGGT GTTTCTCCTTGAAGTTTGCG	NM_204211.1	146

SOD3	TTTTCTCCTAAAGATGGCAAG CTTCCTGCTCATGGATCACAA	XM_420760.3	109
GCLC	TCTGTAGATGATCGAACGC TCCTTTATTAGGTGCTCGTAG	XM_419910.4	176
GCLM	GCTGCTAACTCACAATGACC TGCATGATATAGCCTTTGGAC	NM_001007953.1	174
HO-1	GCTGAAGAAAATCGCCCAA ATCTCAAGGGCATTCATTCGG	NM_205344.1	135
NQO1	CTCCGAGTGCTTTGTCTACG AATGGCTGGCATCTCAAACC	XM_015874307.1	151
Nrf2	CTGCCCAAAACTGCCGTA TCAAATCTTGCTCCAGTTCCA	NM_205117.1	60
GST	GATGAACGTCGTCCAACCAG TCATGTCCGTGGTCCTTCAA	NM_001001777.1	117
GSTA2	TCACTGAACGAGCTACAACC TGCCAACAAGATAATCCTGACC	NM_001001776.1	216
GSTA3	ACAATCTCTACGGGAAAGACCT TGCCAACAAGATAATCCTGACC	XM_015284821.2	216
GSTA4	GCTACATCGCAGGGAAATACA TGGAGAGAAAGGAAACACCAA	NM_204818.2	122
GSTM2	GACTTCCCCAACCTGCCCTA CTGCTTCTCCACCTCCGTCT	NM_205090.1	120
GSTO1	TTTCCAAGGCACTCAAAGAAGG TCCCCACCATAAAACACAGT	XM_015288649.2	118
GSTT1	ACCACAGCCATCAGAGAAGC GCCAAGGAAATCTCGCTCCC	NM_205365.1	120
UGT1A1	GACTCGTGCCTTTATTACCCAT TACTCGTTTCGCATTGTCCA	XM_015289252.2	118
SIRT1	TGCTCCCAGAAACAATCCC CCTGTAGAAGTTTCACCGCATC	XM_051866378.1	141
PGC-1α	TACAGCAATGAGCCTGCCAA AGGCAATCCATCCTCATCCAC	XM_015862904.1	117
NRF1	CAGTATAGCACACCTGGTACCCTC CTCCGATGCCTGCGTTGTCT	XM_015856007.1	247

TFAM	GAAACGTGGCAAAATCTATCCG AGGTCTTCGCGTCCAAGCTC	XM_015866188.1	131
Cyt C	CTGAGGGCTTCTCTTACACA TTCTTCTTGATACCCGCAAA	XM_015281453.2	136
VADC1	GCCTGAAGCTGACTTTTGACTCC GATGTGCTCCCTTTTGTATCCTGT	XM_015875804.1	89
SIRT3	ATAGACCCAACTACGCCCACT TTGTCTGCCATAACGTCTCCC	XM_015863373.1	217
PRDX3	TTCAAGGGGAAATACCTCGTGCTC AGTCCACAGAAACCGCCACC	XM_426543.5	139
Mfn1	GACAGCGATCTACATCCACCA TCTTCCCCTCAAACAAAATCGT	XM_01553014.1	134
Mfn2	TGCTCCCAGAAAATCCC TGCTCCCAGAAACAATC	XM_0517678.1	147
OPA1	GATAAGCCGCACCAAAGAGC TGTCACTTCATCATTTGCCAGA	NM_001039309.1	112
MFF	GAAACGTGGCAAAATCTATCCG AGGTCTTCGCGTCCAAGCTC	XM_015566188.1	124
Parkin	GTCCAGCAAAGCATCGTTCA CAACGATGGAAGGATGCTGG	XM_419615.6	159
p62	GACCCAGCCAAGACTACCAT CAGAGGCATGTAGTTTCGGC	XM_003642061.4	240
Bnip3	CATTACTTCATGCTGCGCCT CAAAGCAACCCAAGCCATCT	NM_001030885.2	182
LC3I	TTACACCCATATCAGATTCTTG ATTCCAACCTGTCCCTCA	XM_417327.6	143
LC3II	AGTGAAGTGTAGCAGGATGA AAGCCTTGTGAACGAGAT	NM_001031461.1	193

Fig 1-S1. Effect of resveratrol on Cd-induced renal function

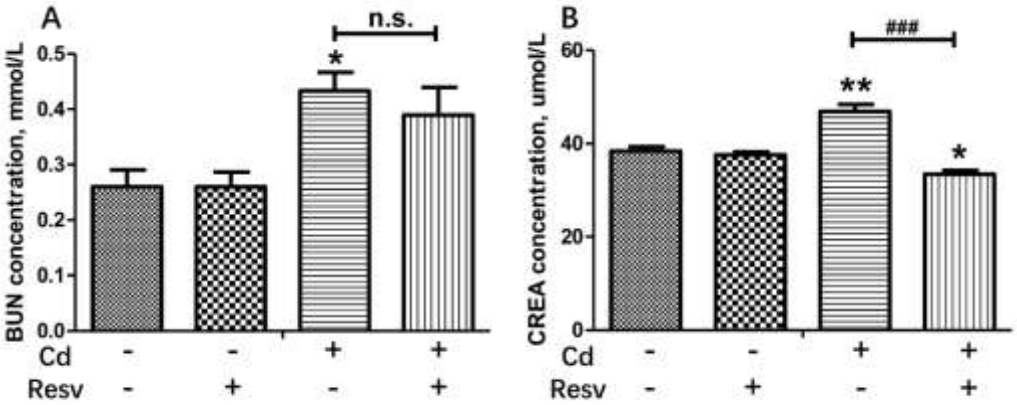

Fig 1-S1. Effect of resveratrol on Cd-induced renal function. (A) BUN concentration. (B) CREA concentration. Data was presented as the means ± SD. Compared with the Con group: **P*<0.05 and ****P*<0.01. Compared with Cd140 group: n.s., no significant difference and $^{\#\#\#}P$<0.001. Cd (-/+): 0/140 mg/kg Cd exposure. Resv (-/+): 0/400 mg/kg resveratrol supplement.

Fig 4-S1. Nrf2 relative mRNA expression

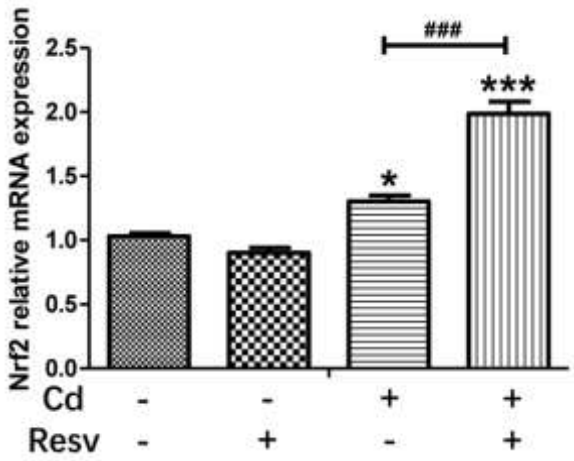

Fig 4-S1. Nrf2 relative mRNA expression. Data was presented as the means ± SD. Compared with the Con group: **P*<0.05 and ****P*<0.001. Compared with Cd140 group: $^{###}$*P*<0.001. Cd (-/+): 0/140 mg/kg Cd exposure. Resv (-/+): 0/400 mg/kg resveratrol supplement.

Fig 5-S1. PGC-1α relative mRNA expression

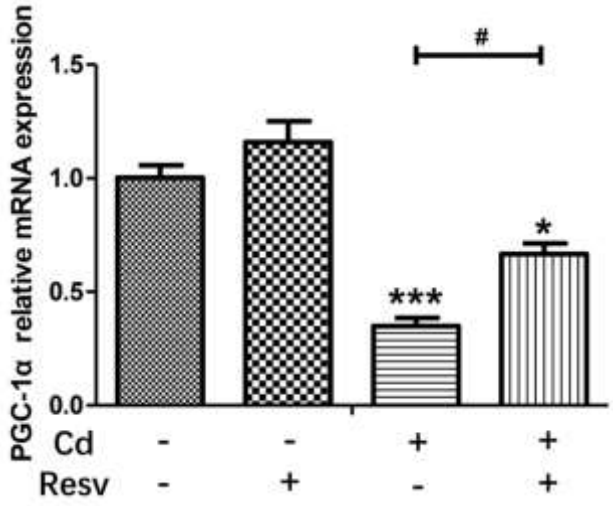

Fig 5-S1. PGC-1α relative mRNA expression. Data was presented as the means ± SD. Compared with the Con group: **P*<0.05 and ****P*<0.001. Compared with Cd140 group: ###*P*<0.001. Cd (-/+): 0/140 mg/kg Cd exposure. Resv (-/+): 0/400 mg/kg resveratrol supplement.