

# Supplementary material

Table S1. Neurodegenerative changes in CA1 region by silver stain

	Intact Control (%)	Curcumin Control (%)	Ozone Control (%)	Curcumin Preventive (%)
1 hour	0.000 ± 0.000	0.000 ± 0.000	1.778 ± 0.572	0.222 ± 0.147
2 hours	0.000 ± 0.000	0.000 ± 0.000	2.111 ± 0.351	0.778 ± 0.401
4 hours	0.111 ± 0.111	0.111 ± 0.111	3.667 ± 0.471	1.333 ± 0.408
8 hours	0.556 ± 0.242	0.444 ± 0.294	5.778 ± 0.662	2.222 ± 0.641

Table S2. Neurodegenerative changes in CA3 region by silver stain

	Intact Control (%)	Curcumin Control (%)	Ozone Control (%)	Curcumin Preventive (%)
1 hour	0.000 ± 0.000	0.000 ± 0.000	1.667 ± 0.373	1.333 ± 0.333
2 hours	0.222 ± 0.147	0.111 ± 0.111	1.778 ± 0.364	0.444 ± 0.242
4 hours	0.333 ± 0.167	0.333 ± 0.167	4.556 ± 0.801	1.889 ± 0.484
8 hours	0.444 ± 0.294	0.444 ± 0.242	7.667 ± 0.687	3.333 ± 0.289

Table S3. Neurodegenerative changes in CA1 region by FJC

	Intact Control (%)	Curcumin Control (%)	Ozone Control (%)	Curcumin Preventive (%)
1 hour	0.000 ± 0.000	0.111 ± 0.111	0.556 ± 0.242	0.111 ± 0.111
2 hours	0.222 ± 0.147	0.333 ± 0.167	1.222 ± 0.222	0.444 ± 0.176
4 hours	0.444 ± 0.176	0.222 ± 0.147	2.000 ± 0.373	0.778 ± 0.324
8 hours	0.556 ± 0.176	0.333 ± 0.167	2.556 ± 0.338	0.444 ± 0.176

Table S4. Neurodegenerative changes in CA3 region by FJC

	Intact Control (%)	Curcumin Control (%)	Ozone Control (%)	Curcumin Preventive (%)
1 hour	0.111 ± 0.111	0.111 ± 0.111	0.667 ± 0.236	0.111 ± 0.111
2 hours	0.222 ± 0.147	0.333 ± 0.167	1.111 ± 0.261	0.222 ± 0.147
4 hours	0.222 ± 0.147	0.555 ± 0.176	1.333 ± 0.287	0.556 ± 0.176
8 hours	0.670 ± 0.240	0.333 ± 0.236	1.890 ± 0.350	0.440 ± 0.180

Table S5A. Plasma level of MDA/4-HNE

	Intact Control (nmol/mL)	Curcumin Control (nmol/mL)	Ozone Control (nmol/mL)	Curcumin Preventive (nmol/mL)
1 hour	2.491 ± 0.2704	2.203 ± 0.174	7.291 ± 0.526	3.537 ± 0.095
2 hours	1.604 ± 0.076	2.374 ± 0.124	8.037 ± 0.596	2.050 ± 0.152
4 hours	2.591 ± 0.058	2.233 ± 0.147	8.630 ± 0.498	2.849 ± 0.020
8 hours	3.684 ± 0.045	1.281 ± 0.124	10.7660 ± 0.522	2.990 ± 0.200

Table S5B. Plasma level of Carbonyl

	Intact Control (nmol/mg)	Curcumin Control (nmol/mg)	Ozone Control (nmol/mg)	Curcumin Preventive (nmol/mg)
<b>1 hour</b>	0.249 ± 0.011	0.277 ± 0.006	0.519 ± 0.016	0.437 ± 0.004
<b>2 hours</b>	0.314 ± 0.016	0.312 ± 0.008	0.653 ± 0.014	0.519 ± 0.007
<b>4 hours</b>	0.302 ± 0.014	0.324 ± 0.008	0.789 ± 0.006	0.538 ± 0.002
<b>8 hours</b>	0.377 ± 0.006	0.305 ± 0.017	0.993 ± 0.009	0.610 ± 0.008

Table S6 Plasma detection of 3-Nitrotyrosine

	Intact Control (IOD)	Curcumin Control (IOD)	Ozone Control (IOD)	Curcumin Preventive (IOD)
<b>1 hour</b>	756800 ± 114624	413800 ± 133372	4536000 ± 814242	3228000 ± 143997
<b>2 hours</b>	653000 ± 197026	629000 ± 80115	4896000 ± 392619	4682000 ± 243195
<b>4 hours</b>	1002000 ± 500746	1469000 ± 174584	7866000 ± 976533	5118000 ± 86059
<b>8 hours</b>	2382000 ± 282492	2419000 ± 413580	8024000 ± 146500	5188000 ± 247147