

Supplemental Materials

Table S1. Cytokines and Chemokines Analyzed.

Name	Abbreviation
Granulocyte-colony stimulating factor	G-CSF
Granulocyte/macrophage-colony stimulating factor	GM-CSF
Interferon-gamma	IFN- γ
Interleukin-1-alpha	IL-1 α
Interleukin-1-beta	IL-1 β
Interleukins 2, 4, 5, 6, 7, 9, and 10	IL-2, IL-4, IL-5, IL-6, IL-7, IL-9, and IL-10
Interleukin 12 p70 subunit	IL-12 (p70)
Interleukins 13, 15, and 17	IL-13, IL-15, IL-17
Chemokine (C-X-C motif) ligand 10 or IFN- γ -induced protein 10	CXCL10 or IP-10
chemokine (C-X-C motif) ligand 1	CXCL1, GRO α , or KC
monocyte chemotactic protein-1	MCP-1
macrophage inflammatory protein-1-alpha	MIP-1 α
chemokine (C-C motif) ligand 5	CCL5 or RANTES
Tumor necrosis factor-alpha	TNF- α

Table S2. Summary of Bodyweight, Water Consumption, and Ingested Dose

Dose	Bodyweight (g)		Water Intake	Average Daily Ingested Dose	
	Week 1	Week 13	(mL/day) 13-Week Average	SDD	(mg/kg) ^a Cr(VI)
0	18.5	25.8	5.2	0	0 ^b
0.3	18.7	26.4	5.3	0.07	0.024
4	19.1	25.9	5.3	0.92	0.32
14	18.7	26.3	5.1	3.1	1.1
60	18.8	25.3	5.0	13.2 (9) ^f	4.6
170	18.6	24.9	4.3 ^d	33.0	11.6
520	18.6	23.3 ^c	3.7 ^e	88.7 (45) ^g	31.1

^acalculated using average weekly body weight and water consumption data, and percent mass of Cr(VI) in SDD.

^btotal chromium concentration in tap water was 0.098 µg/L (9.8 x 10⁻⁵ mg/L)

^cbodyweight was significantly lower than control group on weeks 2 and 4-13 by ANOVA followed by Dunnett's test

^dwater intake was significantly lower than control group on weeks 5, 7, 8, 10 and 11 by ANOVA followed by Dunnett's test

^ewater intake was significantly lower than control group on weeks 1, 3, 5-7, and 9-13 by ANOVA followed by Dunnett's test

^fparentheses indicate reported average daily doses at 62.6 mg/L SDD drinking water concentrations in NTP (2007)

^gparentheses indicate reported average daily doses at 500 mg/L SDD drinking water concentrations in NTP (2007)

Table S3. Summary of Serum Iron, Transport and Storage Proteins^a

mg/L SDD	Serum Iron ($\mu\text{g/dL}$)	Transferrin (mg/mL)	Ferritin (ng/mL)
0	167.2 \pm 22.0	3.668 \pm 0.129	393.60 \pm 58.62
0.3	194.6 \pm 25.6	3.640 \pm 0.323	394.20 \pm 50.89
4	217.2 \pm 19.9	3.712 \pm 0.281	350.00 \pm 69.13
14	212 \pm 50.6	3.524 \pm 0.170	328.25 \pm 67.62 ^b
60	190 \pm 23.2	3.604 \pm 0.093	263.20 \pm 37.00
170	213.2 \pm 40.2	3.542 \pm 0.204	351.80 \pm 136.49
520	117.6 \pm 17.7	3.776 \pm 0.765	317.00 \pm 76.95

^adata are mean \pm s.d.; n=5 except where noted

^bn=4

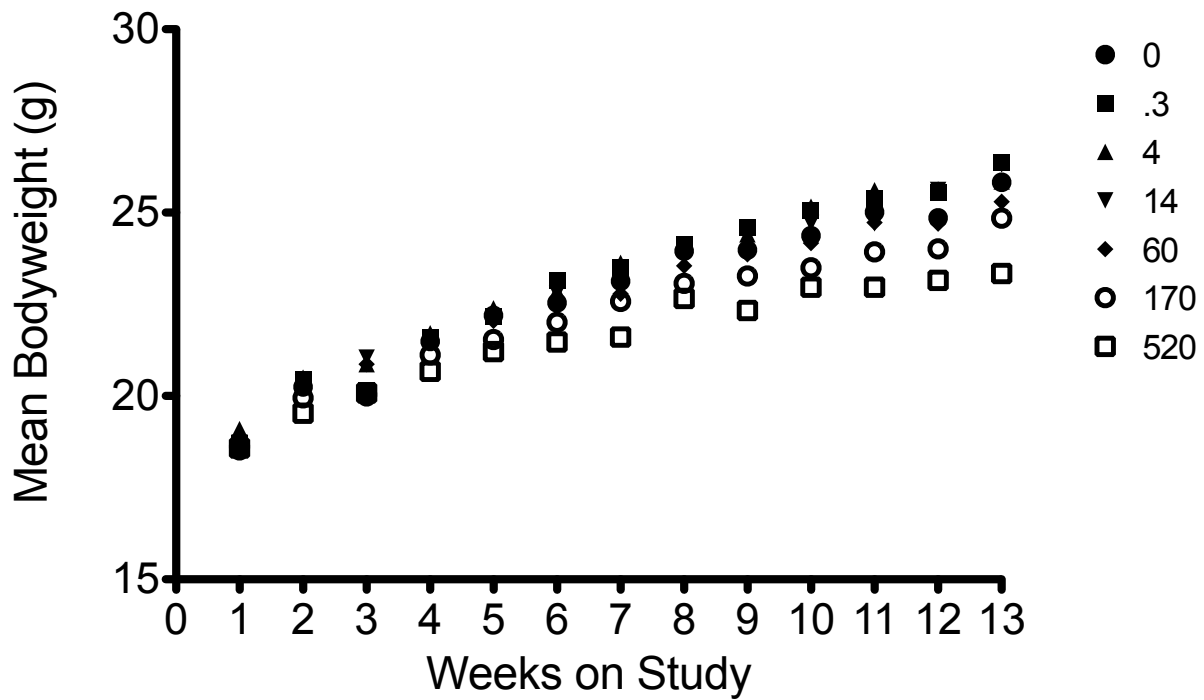


Figure S1. Weekly mean bodyweight for each dose group.

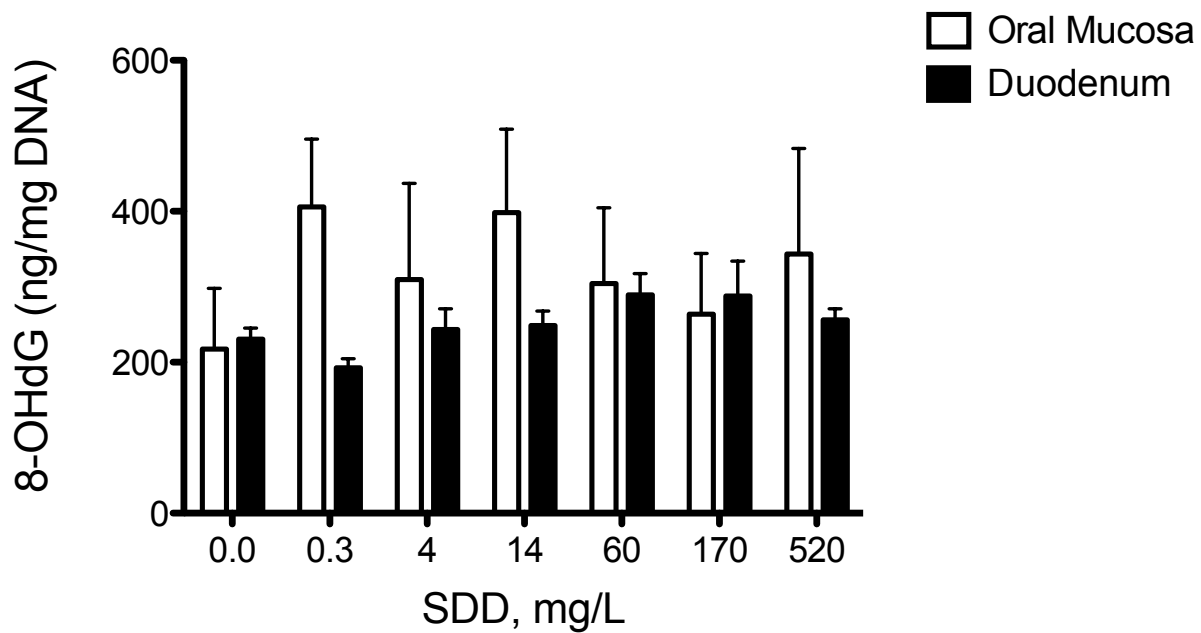


Figure S2. Measures of oxidized DNA in oral and duodenal epithelia after 90 days of exposure to SDD. Data plotted are mean and SEM (n = 8-10 animals).

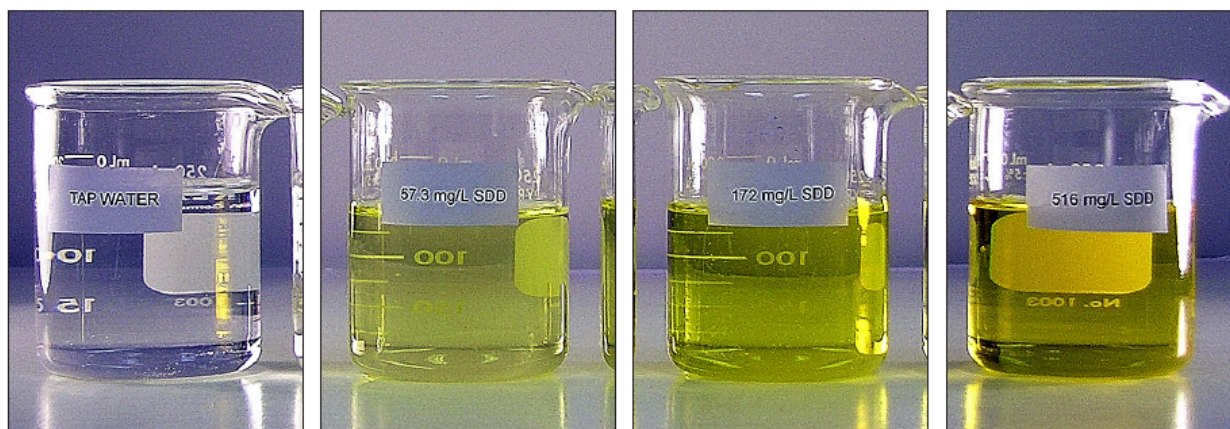


Figure S3. Color of tap water, 60, 170, and 520 mg/L SDD (left-to-right).