

TABLE 4. Summary of Selected Publications of Fluoride Levels in Rats Following Fluoride Exposure

Study	Rat Strain	Age (n)	Fluoride ppm	Route	Duration	Brain [$\mu\text{g/g}$] ^a	Serum/Plasma [$\mu\text{g/ml}$] ^b	Urine [$\mu\text{g/ml}$] ^a	Bone [$\mu\text{g/g}$] ^b
Adult Exposure									
Balayssac et al. 2002 ^c	SD	adult (10 ♂)	0, 75, 150	DW	104 days		1, 5.5, 10.9 μM		
de Carvalho et al. 2006	Wistar	adult (10 ♂)	0, 5, 15, 50	DW	120 days		0.03, 0.048, 0.115, 0.187		647, 808, 1414, 3439
Dong et al. 2015	SD	adult (30 ♂♀)	0.23, 22.6	DW	10 months			1.7, 2.16	1.52, 2.31
Ekambaram & Paul 2001	Wistar	adult (8 ♀)	0, 226.24	DW	60 days		0.22, 1.94		
Q Gao et al. 2009	SD	adult (8 ♂♀)	0.23, 2.26, 22.6	DW	6 months			1.02, 2.59, 5.96	669.4, 1135.2, 1304.3
YL Gao et al. 2009	SD	adult (8 ♂♀)	0, 62.68	gavage	3 months		0.018, 7.135	1.462, 64.966	
S Jiang et al. 2014	SD	adult (8 ♂)	0, 54.3	DW	3 months	0.25, 1.19 CTX	0.09, 0.4		
Li et al. 2015	Wistar	juvenile-adult (10 ♂)	0, 22.6	DW	3 months			6.67, 22.5	0.0646, 0.189
Lombarte et al. 2015	SD	adult (10 ♀)	0, 15	DW	1 month		2.28, 2.85		
Mullenix et al. 1995	SD	adult (20 ♀)	0, 45.3	DW	6 weeks	0.406, 0.252 BG 0.358, 0.325 CB 0.479, 0.602 CTX 0.258, 0.79 HC 0.396, 0.308 HT 0.634, 0.306 MB	0.01, 0.077		
Rogalska et al. 2017	Wistar	adult (8 ♂, ♀)	0, 4.5, 22.6	DW	4 weeks		0.0541, 0.0596, 0.0823		
Rumiantsev et al. 1988 ^c	Rat	adult	0, 33.32	gavage	30 days			14, 744 μg	2.3, 10.6 mg% thigh bone
Shalini & Sharma 2015	Wistar	adult (10 ♂)	.9, 10	DW	2 months	0.55, 2.61	.048, .06		
Whitford et al. 2009	SD	adult (8 ♀)	0, 33.2 85.6, 155.2	DW	8 months	0.082, 3.9, 6.42, 18.1 $\mu\text{mol/kg}$	0.32, 15.27, 25.72, 97.56 $\mu\text{mol/L}$		150, 5408, 9497, 14,847
Developmental Exposure									
Banji et al. 2013	Wistar	dam (6 ♀)	0, 20 mg/kg NaF	gavage	GD6-PND11		Dams 0.12, 0.32 Pups 0.14, 0.42		
Basha et al. 2011	Wistar	dam (8 ♀)	0, 100, 200	DW	GD0-3 months	0.318, 1.83, 2.32 CB 0.672, 2.28, 3.43 CC 0.258, 0.993, 1.93 HC 0.358, 2.12, 3.09 MO			
YT Dong et al. 2015	SD	dams 10 months (30 ♀)	0, 50	DW	GD0-PND30 (10)			1.7, 2.16	35, 211
Gui et al. 2010	SD	dams 6 months (6 ♀)	6.2, 104 mg/kg NaF	food	GD0-PND30 (10)	6.2 and 104 mg/kg NaF		0.98, 8.52	1124, 1873

^a Values represent total F $\mu\text{g/g}$ (ppm) unless otherwise noted.

^b Values represent total F $\mu\text{g/ml}$ (ppm) unless otherwise noted.

^c Values presented as in publication

Abbreviations: DW-drinking water, BG-basal ganglia, CC-cerebral cortex, CB-cerebellum, CTX-cortex, HC-hippocampus, HT-hypothalamus, MB-midbrain, MO-medulla oblongata