

Supplementary

In Vitro and In Vivo Testing to Determine Cd Bioaccessibility and Bioavailability in Contaminated Rice in Relation to Mouse Chow

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Table S1. Analytical data quality assessment (mg kg⁻¹, mean ± SD, *n* = 3).

Metals	Certified value	Determined value
CRM-GBW10051 (pork liver)		
Cd	1.0 ± 0.07	0.99 ± 0.05
Cu	52 ± 3	40.9 ± 1.6
Zn	211 ± 11	171 ± 7
Mg	630 ± 40	622 ± 3
Fe	519 ± 34	488 ± 9
Ca	230 ± 30	196 ± 2
CRM-GBW10010 (rice)		
Cd	0.087 ± 0.005	0.080 ± 0.002
Cu	4.9 ± 0.3	3.90 ± 0.13
Zn	23 ± 2	17.5 ± 0.6
Mg	410 ± 60	379 ± 11
Fe	7.6 ± 1.9	6.7 ± 0.1
Ca	110 ± 10	93 ± 7

Table S2. The average weights of mice kidney, liver and femur in different treatment groups after 10-day of Cd exposure (g, mean ± SD, *n* = 3).

	kidney	liver	femur
Control	0.75 ± 0.30	2.04 ± 0.30	0.38 ± 0.04
Chow 1	0.68 ± 0.20	1.80 ± 0.03	0.48 ± 0.02
Chow 2	0.49 ± 0.01	1.77 ± 0.04	0.64 ± 0.11
Rice 1	0.80 ± 0.01	2.41 ± 0.20	1.03 ± 0.04
Rice 2	0.85 ± 0.02	2.51 ± 0.10	1.08 ± 0.03

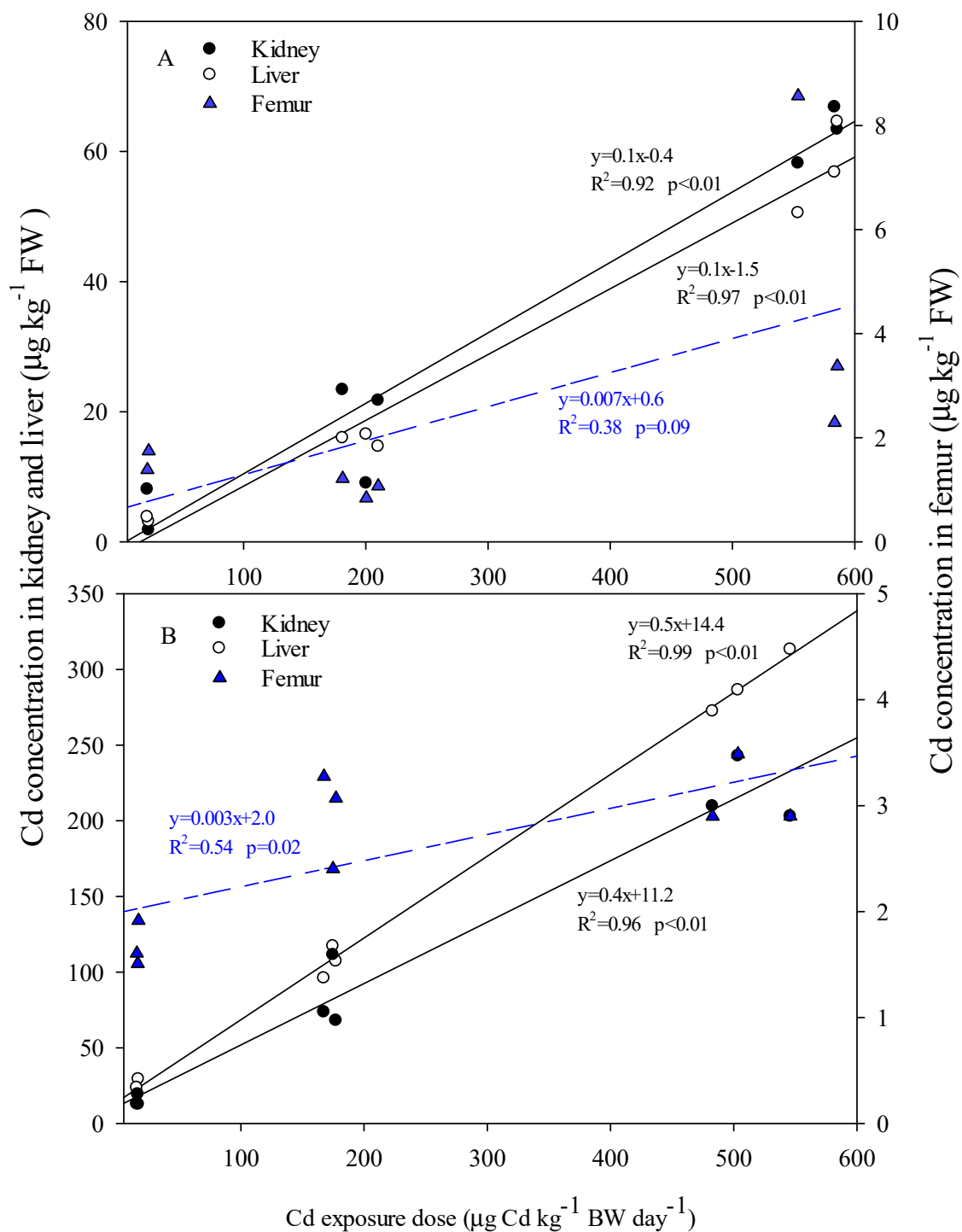


Figure S1. Relationship between Cd accumulation in mouse organs and exposure dose when mice were supplied Cd-amended mouse chow (A) or contaminated rice (B) for 10 days. Mouse chow was amended with Cd chloride, Control, 0.1 mg Cd kg⁻¹; Chow 1, 0.99 mg Cd kg⁻¹ and Chow 2, 3.64 mg Cd kg⁻¹. Contaminated rice purchased from farmer's market, Rice 1, 1.26 mg kg⁻¹ and Rice 2, 3.65 Cd mg kg⁻¹. Please note the different scale of femur Cd values.