

Identification and characterization of gadolinium(III) complexes in biological tissue extracts

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Supplementary material

Table S1. Effect of different sample mass and extractant volume on ultrasonic water extraction of total gadolinium in Optimark spiked bovine muscle tissue

Sample Mass (g)	Extractant Volume (mL)	Gd Concentration ($\mu\text{g g}^{-1}$) ^a	Gd Recovery (%) ^{a, b}
0.050	5	86.1 $\pm$ 14.8	34.4 $\pm$ 5.9
0.100	5	85.5 $\pm$ 4.1	34.0 $\pm$ 1.6
0.200	5	82.0 $\pm$ 4.7	32.6 $\pm$ 1.9
0.300	5	44.5 $\pm$ 8.4	17.7 $\pm$ 3.3
0.050	10	18.7 $\pm$ 0.4	7.4 $\pm$ 0.2
0.100	10	32.8 $\pm$ 2.7	13.1 $\pm$ 1.1
0.200	10	30.3 $\pm$ 3.5	12.0 $\pm$ 1.4
0.300	10	29.3 $\pm$ 2.0	11.7 $\pm$ 0.8

^a Mean $\pm$ standard error (n = 3), where the $\mu\text{g g}^{-1}$ results are based on dry tissue weight

^b % Recovery extraction = (total Gd from extraction)/ (total Gd from microwave digestion) x 100

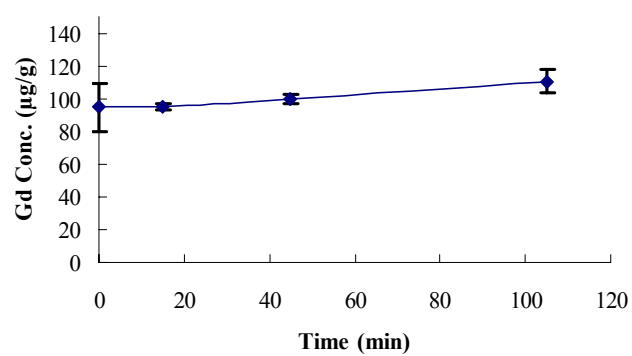


Figure S1. Variation of total gadolinium concentration in the Optimark spiked bovine muscle tissue extract with the sonication time. Conditions: 0.3 g of bovine muscle tissue in 5 mL of water sonicated for the different time intervals.