

Table S1. Reports of analysis methods on PMZ and its metabolites in edible animal tissues.

Analytes	Target tissue	Equipment	LOD, LOQ	Reference
PMZ, PMZSO, Nor1PMZ	Swine muscle, liver, kidney, fat	LC-MS/MS	<p>LOD: muscle, liver, and kidney 0.05 µg/kg for PMZ, PMZSO, 0.1µg/kg for Nor1PMZ.</p> <p>LOQ: muscle, liver, and kidney 0.1 µg/kg for PMZ and PMZSO, 0.5 µg/kg for Nor1PMZ.</p> <p>LOD and LOQ of fat, 0.05 µg/kg and 0.1 µg/kg for all analytes.</p>	This study
5 phenothiazines, including PMZ	Fish	LC-MS/MS	<p>LOD: 0.1ng/g</p> <p>LOQ: 0.5ng/g</p>	Li et al., 2010 [33]
24 tranquillizer drugs, including PMZ	fish and fishery product	UPLC-Q-Orbitrap HRMS	LOQ: 0.5µg/kg	Gao et al., 2018 [47]
PMZ, Chlorpromazine	Poultry Eggs	LC-MS/MS	LOD: for PMZ 0.05µg/kg, LOQ: for PMZ 0.17µg/k	Yang et al., 2020 [48]
10 sedatives, including PMZ	Pork, kidney	UPLC-MS/MS	LOD: 0.5µg/kg LOQ: 1µg/kg	Sun et al.,2010 [49]
Tranquilizers, including PMZ	Swine muscle, liver, and kidney	LC-MS/MS	LOD: 0.06-0.1g/kg LOQ: 0.2-0.41g/kg	He et al., 2012 [34]
PMZ	Meat of bovine, porcine and ovine	LC-MS/MS	LOD: 0.1µg/kg LOQ: 0.3µg/kg	Li et al., 2019 [50]
15 sedatives, including PMZ	Meat of bovine and poultry, porcine liver	UPLC-MS/MS	LOD: 1µg/kg; LOQ: 3µg/kg	Wang et al., 2020 [41]
PMZ, PMZSO	Meat of bovine and poultry, porcine liver	UPLC-Q-TOF/MS	LOD: PMZ 2µg/kg, PMZSO 0.5µg/kg LOQ: PMZ 6µg/kg, PMZSO 1.5 µg/kg	Wang et al., 2021 [51]
PMZ	Pork product	LC-MS/MS	LOD: PMZ 0.3ng/g, LOQ : PMZ 1 ng/g	Liang et al., 2016 [52]
PMZ, PMZSO	Porcine meat, liver, kidney	LC-MS/MS	LOD: PMZ 0.04µg/kg, PMZSO 0.17µg/kg LOQ: PMZ 0.12µg/kg, PMZSO 0.51µg/kg	Chen et al., 2022 [43]

PMZ, Chlorpromazine	Porcine kidney	HPLC-UV	LOD: PMZ and Chlorpromazine 10µg/kg	Fan et al., 2005 [21]
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Table S2. Original Data of Recovery and precision of spiked blank samples.

Tissues	Analyte	Concentration ($\mu\text{g/kg}$)				Recovery ($\bar{X}\pm\text{S.D.}$)(n=6) (%)			Intra-day RSD (%) (n=6)			Inter-day RSD (%)
		Spiked	Found (\bar{X} , n=6)			Batch I	Batch II	Batch III	Batch I	Batch II	Batch III	
Muscle	PMZ	0.1	0.077	0.082	0.082	77.13 \pm 5.44	81.73 \pm 9.12	82.35 \pm 8.82	7.05	11.16	10.71	9.86
		5	5.00	4.58	4.72	100.00 \pm 2.82	91.62 \pm 2.92	94.47 \pm 4.51	2.82	3.18	4.78	5.13
		50	52.33	47.15	50.08	104.55 \pm 5.98	94.37 \pm 3.56	100.27 \pm 3.84	5.72	3.78	3.83	6.12
	PMZSO	0.1	0.10	0.10	0.099	102.95 \pm 7.21	103.47 \pm 8.33	99.22 \pm 10.31	7.00	8.06	10.39	8.26
		5	4.64	5.31	5.17	92.82 \pm 1.97	106.33 \pm 3.20	103.28 \pm 7.97	2.12	3.01	7.72	7.62
		50	43.12	45.23	43.95	86.25 \pm 2.08	90.45 \pm 2.99	87.88 \pm 2.84	2.42	3.30	3.24	3.49
	Nor1PMZ	0.5	0.52	0.45	0.47	103.70 \pm 7.89	90.03 \pm 7.53	94.33 \pm 8.84	7.61	8.36	9.37	10.02
		5	4.75	4.81	5.04	95.00 \pm 6.20	96.10 \pm 3.50	100.73 \pm 4.97	6.52	3.64	4.93	5.53
		50	45.92	55.58	53.70	91.85 \pm 2.97	111.17 \pm 3.66	107.43 \pm 6.38	3.24	3.29	5.95	9.27
Liver	PMZ	0.1	0.10	0.10	0.097	101.02 \pm 10.90	104.15 \pm 7.39	96.72 \pm 6.09	10.79	7.10	6.29	8.42
		5	5.37	5.13	4.35	107.17 \pm 2.48	102.72 \pm 8.20	87.08 \pm 4.55	2.32	7.99	5.22	10.42
		50	44.37	45.42	44.53	88.75 \pm 4.44	90.82 \pm 5.07	89.10 \pm 3.87	5.00	5.58	4.35	4.84
	PMZSO	0.1	0.098	0.10	0.098	97.52 \pm 7.88	101.22 \pm 5.12	97.88 \pm 9.62	8.08	5.06	9.83	7.58
		5	4.58	5.01	4.54	91.52 \pm 6.05	100.23 \pm 3.94	90.72 \pm 4.96	6.61	3.93	5.46	6.89
		50	50.02	48.23	52.20	100.02 \pm 4.42	96.48 \pm 5.13	104.33 \pm 1.86	4.42	5.31	1.78	5.10
	Nor1PMZ	0.5	0.49	0.48	0.47	97.48 \pm 8.35	95.41 \pm 6.61	94.17 \pm 6.01	8.56	6.92	6.39	7.47
		5	4.57	4.76	4.93	91.28 \pm 5.03	95.28 \pm 8.94	98.50 \pm 6.85	5.51	9.38	6.95	7.76
		50	47.32	49.33	50.40	94.63 \pm 3.85	98.67 \pm 4.29	100.88 \pm 3.60	4.07	4.35	3.57	4.59
Kidney	PMZ	0.1	0.086	0.088	0.094	86.18 \pm 4.29	88.05 \pm 2.53	94.36 \pm 7.33	4.98	2.87	7.76	6.70
		5	4.27	4.48	4.22	85.48 \pm 5.05	89.63 \pm 4.34	84.30 \pm 3.63	5.91	4.84	4.30	5.45
		50	45.88	44.78	45.43	91.80 \pm 2.77	89.60 \pm 5.68	90.83 \pm 1.68	3.02	6.34	1.84	4.02
	PMZSO	0.1	0.10	0.095	0.097	100.22 \pm 10.67	94.52 \pm 9.60	97.07 \pm 6.56	10.16	10.65	6.76	9.14
		5	5.02	5.23	5.10	100.60 \pm 4.31	104.53 \pm 5.88	101.95 \pm 3.11	4.29	5.63	3.05	4.55
		50	47.80	49.58	45.47	95.62 \pm 1.70	99.17 \pm 4.00	90.90 \pm 2.19	1.77	4.03	2.04	4.58
	Nor1PMZ	0.5	0.47	0.48	0.50	93.75 \pm 6.36	95.92 \pm 11.94	99.15 \pm 5.35	6.79	12.45	5.39	8.62
		5	5.12	4.93	5.22	102.42 \pm 7.24	97.40 \pm 10.32	104.30 \pm 6.13	7.07	10.59	5.88	7.86
		50	52.18	47.95	49.70	104.22 \pm 5.79	95.92 \pm 6.93	99.32 \pm 2.69	5.56	7.23	2.71	6.32

Fat	PMZ	0.1	0.097	0.10	0.096	96.87±7.32	100.37±7.60	96.13±9.16	7.55	7.57	9.53	7.63
		5	4.88	5.03	5.20	97.62±3.58	100.50±3.12	104.05±3.30	3.67	3.10	3.17	4.12
		50	52.35	48.83	50.33	104.55±6.95	97.63±5.47	100.53±5.67	6.65	5.60	5.64	6.40
	PMZSO	0.1	0.094	0.10	0.095	94.02±6.79	100.55±10.52	94.73±8.52	7.22	10.46	9.00	9.07
		5	4.23	4.43	4.90	84.65±3.88	88.66±3.74	97.85±5.20	4.59	4.22	5.32	7.73
		50	46.30	45.48	46.40	92.56±3.32	90.93±4.65	92.82±3.00	3.59	5.11	3.23	4.79
	NorPMZ	0.1	0.10	0.096	0.10	100.47±9.91	96.07±8.68	101.38±11.00	9.86	9.04	10.85	9.68
		5	5.00	5.22	5.26	100.13±6.51	104.17±7.68	105.38±5.49	6.50	7.37	5.21	6.37
		50	49.38	47.88	43.43	98.73±4.93	92.25±7.07	86.88±6.87	4.99	7.66	7.90	7.53