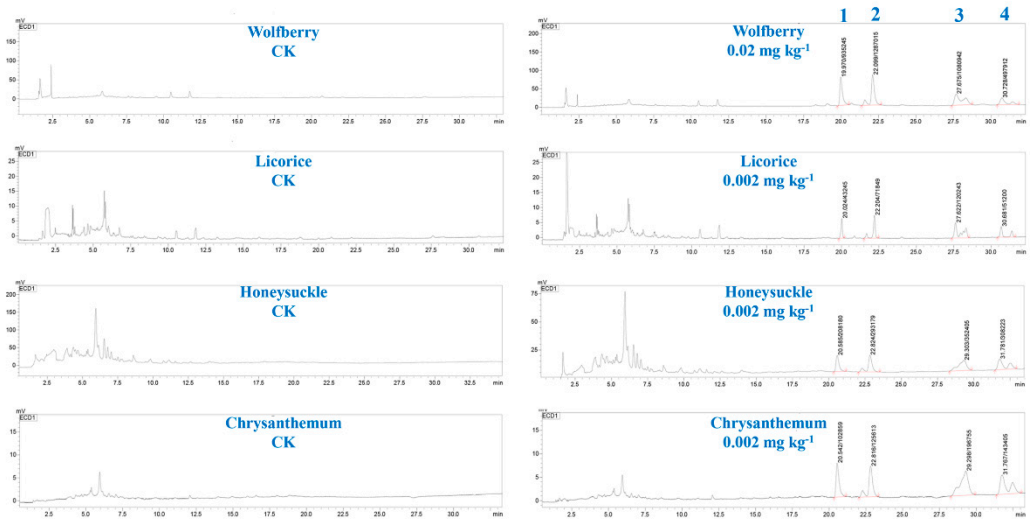

Figure S1. Typical GC-ECD chromatograms of fenpropathrin, lambda-cyhalothrin, beta-cypermethrin, and fenvalerate in infused tea.

Table S1. Recovery ratios and RSDs of pyrethroids by different extraction solvents (n = 3)

Pesticides	Acetonitrile		Methanol		Acetone	
	Average recovery ± SD [a] (%)	RSD (%) [b]	Average recovery (%)	RSD (%)	Average recovery (%)	RSD (%)
Fenpropathrin	78.2 ± 4.6	3.24	45.3 ± 1.9	4.33	74.2 ± 4.0	6.22
Lambda-cyhalothrin	77.4 ± 5.7	4.23	51.2 ± 5.5	3.23	70.1 ± 2.1	2.39
Beta-cypermethrin	80.2 ± 9.3	5.22	47.6 ± 9.3	6.44	76.1 ± 2.6	4.38
Fenvalerate	82.4 ± 4.4	3.42	55.8 ± 3.2	4.97	68.3 ± 9.7	4.32

[a] Standard deviation; [b] Relative standard deviation for reproducibility in %.

Table S2. Dependence of recovery ratios of the four pyrethroids on the volume of elution solvent (n = 3)

Pesticides	Recoveries of fraction 1 (%)	Recoveries of fraction 2 (%)	Recoveries of fraction 3 (%)	Recoveries of fraction 4 (%)	Recoveries of Fraction 5 (%)	Recoveries of Sum (%)
Fenpropathrin	20.3 ± 1.7 [a]	50.8 ± 3.8	15.2 ± 3.6	ND [b]	ND	86.3
Lambda-cyhalothrin	14.5 ± 0.7	64.3 ± 8.4	9.2 ± 1.0	1.2 ± 0.5	ND	89.2
Beta-cypermethrin	27.3 ± 1.4	61.3 ± 4.9	5.4 ± 1.3	ND	ND	94.0
Fenvalerate	26.8 ± 2.9	45.2 ± 6.2	19.5 ± 4.5	2.3 ± 1.1	ND	93.8

[a] mean residual rate ± Standard deviation (SD) (%); [b] Not detected.

Table S3. Transfer rate of the four pyrethroids in different herbal teas and corresponding physicochemical properties

Pesticides	transfer ratio ± SD [a] %				Ws [b] (mg·L^{-1}) (25°C)	LogK$_{ow}$ [c]
	Wolfberry	Licorice	Honeysuckle	Chrysanthemum		
Fenpropathrin	4.02 ± 0.85 a [d]	3.04 ± 0.16 a	5.76± 0.33 b	5.64± 0.32 b	1.4×10^{-2}	5.7
Lambda-cyhalothrin	2.33 ± 0.26 a	1.34 ± 0.21 a	3.54± 0.41 b	3.76± 0.18 b	4.0×10^{-9}	7.0
Beta-cyhalothrin	3.45 ± 0.35 a	2.56 ± 0.15 a	5.21± 0.22 b	5.20± 0.42 b	9.3×10^{-5}	6.0
Fenvalerate	3.15 ± 0.18 a	2.23 ± 0.10 a	4.95± 0.40 b	4.76± 0.13 b	3.2×10^{-5}	6.2

[a] Standard deviation; [b] water solubility; [c] Octanol-water partition coefficient; [d] Different lower case letters at the top of the columns mean significant differences in the transfer ratio at a *p* value of 0.05. Ws and LogK$_{ow}$ were obtained from Tomlin, 1997.

Table S4. Estimated exposure risk to the four pyrethroids from honeysuckle, chrysanthemum, wolfberry, and licorice tea.

Matrix	Pesticides	MRL [a] (mg kg^{-1})	ADI [b] (mg kg^{-1} bw^{-1})	Transfer ratio [c] (%)	EER
Fenpropathrin	Wolfberry	5	30	6.74	0.21
	Licorice			6.95	0.18
	Honeysuckle			7.65	0.29
	Chrysanthemum			7.11	0.18
Lambda-cyhalothrin	Wolfberry	0.5	2	5.38	0.25
	Licorice			3.28	0.13
	Honeysuckle			5.70	0.33
	Chrysanthemum			4.49	0.17
Beta-cyhalothrin	Wolfberry	0.05	20	6.43	0.0030
	Licorice			5.78	0.0022
	Honeysuckle			6.52	0.0038
	Chrysanthemum			7.66	0.0029
Fenvalerate	Wolfberry	0.2	7	5.21	0.027
	Licorice			6.57	0.029
	Honeysuckle			6.19	0.041
	Chrysanthemum			5.59	0.025

[a] Maximum residue limit, MRL values of lambda-cyhalothrin and beta-cyhalothrin were obtained from the EU and Japan, respectively, and others were obtained from the GB 2763-2014, China (National Food Safety Standard-maximum residue limits for pesticides in food); [b] Acceptable daily intake; [c] Obtained from the total transfer ratios of the first, second and third infusions.