S1.1. Solid-Phase Extraction and LC/MS analysis 考虑加上有关联参数的变化柱状图

Analytes were extracted in a batch of nine samples by using 6 mL, 200 mg hydrophilic-lipophilic balance (HLB) cartridges from ANPEL. The SPE cartridges were sequentially preconditioned with 5 mL of acetonitrile, 5 mL of methanol, and 5 mL of reagent water. After loading of the sample at a rate of 5 ml min^{-1}, the cartridges were rinsed with 5 mL of deionized water and then dried for 30 min. Next, the cartridges were eluted with 6 mL of 1/1 (v/v) acetonitrile/acetone and 6 mL methanol. The extracts were evaporated to near dryness under a gentle stream of nitrogen and reconstituted to a final volume of 0.5 mL with methanol. The final samples contained a fixed concentration (40 ng L^{-1}) of the internal standards d_{14}-prometryn and d_5-atrazine.

All analyses were performed on a 1260 Infinity Ultra High-Performance Liquid Chromatograph coupled with a Single Mass Spectrophotometer (Agilent LC/MS G6120B, USA). All analytes were separated using an Agilent Poroshell 120 EC-C18 column (50×4.6 mm, 2.7 μm particle size) with the temperature kept at 30 ℃. A binary gradient consisting of deionized water containing 0.1% formic acid (v/v) (A) and methanol (B) at a flow rate of 0.6 mL min^{-1} was used. The gradient was performed as follows: 10% B held for 0.5 min, increased linearly to 100% B at 15.5 min, then held at 100% B for 2.5 min and back to 10% B after 0.5 min. A 6-min equilibration step at 10% B was used at the beginning of each run to bring the total run time per sample to 24.5 min. The injection volume was 10 μL for each sample. Each run we only detected only one contaminant or two separated contaminants to guarantee the signal effect for quantitation.

Mass spectrometry was equipped with electrospray ionization source in the positive mode throughout the study. Optimization of compound-dependent and source-dependent parameters was determined by tests of compound standards. Nitrogen gas was used as the nebulizer gas at a flow rate of 12 mL min^{-1}. The desolvation temperature was 300 ℃, and the capillary voltage was 3000 eV. The qualitative retention time of all analyses including internal standards, optimized MS of quantitative precursor ion and fragmentor are presented in **Table S1**. Concentration value was measured by using the linear regression equations (R^2>0.99) after chromatography of standard solutions in the range 2.0-160 μg L^{-1} (2.0-20.0 μg L^{-1} and 20-160 μg L^{-1})

Table S1 Detection condition of target pesticides

Name	category	CAS	Chemical formula	precursor ion ESI Positive	fragmentor (eV)	Retention time (min)	MDL (ng/L)
Atrazine	Herbicides	1912-24-9	$C_8H_{14}ClN_5$	216.1	110	12.40	0.35
Simazine	Herbicides	122-34-9	$C_7H_{12}ClN_5$	202.1	110	11.06	0.39
Metolachlor	Herbicides	51218-45-2	$C_{15}H_{22}ClNO_2$	284.1	80	14.70	0.23
Prometryn	Herbicides	7287-19-6	$C_{10}H_{19}N_5S$	242.1	120	12.80	0.30
Isoproturon	Herbicides	34123-59-6	$C_{12}H_{18}N_2O$	207.1	100	12.67	0.15
Ethoxyquin	Fungicides	91-53-2	$C_{14}H_{19}NO$	217.1	80	12.40	1.00
Tebuconazole	Fungicides	107534-96-3	$C_{16}H_{22}ClN_3O$	308.2	110	14.70	1.00
Metalaxyl	Fungicides	57837-19-1	$C_{15}H_{21}NO_4$	280.1	80	12.64	0.27
Pirimicarb	Insecticides	23103-98-2	$C_{11}H_{18}N_4O_2$	239.1	90	8.45	0.28
Caffeine	PPCPs	58-08-2	$C_8H_{10}N_4O_2$	195.1	70	6.8	0.81
DEET	PPCPs	134-62-3	$C_{12}H_{17}NO$	192.1	65	12.50	0.24
Salicylic acid	PPCPs	69-72-7	$C_7H_6O_3$	137.0	80	1.25	0.39
Bisphenol A	PPCPs	80-05-7	$C_{15}H_{16}O_2$	227.1	120	12.60	0.86
Estrone	PPCPs	53-16-7	$C_{18}H_{22}O_2$	269.2	150	13.60	0.51
d_5-Atrazine	Internal Standard	163165-75-1		221.1		12.30	
d_{14}-Prometryn	Internal Standard	1202864-57-0		256.1		12.70	
d_5-Bisphenol A	Internal Standard	86588-58-1		232.1		12.1	

Note: when retention time of internal standards shift, the retention time of target compounds shift correspondingly.

Table S2 Spiking Matrix and Recovery Data, Spiking concentration of 40 μg L^{-1}

Mode	Name	R1 μg L^{-1}	R1+S μg L^{-1}	Recovery (%)	R2 μg L^{-1}	R2+S μg L^{-1}	Recovery (%)	R3 μg L^{-1}	R3+S μg L^{-1}	Recovery (%)
POS	atrazine	22.89	50.48	68.98	28.07	51.92	59.63	24.05	50.84	66.97
	caffeine	11.81	44.25	81.10	15.33	40.96	64.07	15.28	50.47	87.96
	simazine	24.03	66.56	106.33	39.03	69.79	76.91	27.23	73.96	116.80
	ethoxyquin	20.02	53.31	83.24	21.91	58.30	90.98	17.86	61.61	109.36
	DEET	8.70	63.94	138.10	15.96	60.29	110.83	20.02	57.51	93.71
	Isoproturon	20.34	64.55	110.51	25.55	72.14	116.47	21.28	67.57	115.73
	metelaxyl	10.59	47.98	93.46	16.52	62.20	114.21	12.52	55.43	107.27
	pirimicarb	17.45	45.14	69.22	26.30	45.26	47.38	18.61	44.04	63.58
	metolachlor	12.46	41.10	71.58	21.95	44.30	55.88	18.15	50.24	80.23
	prometryn	22.37	57.77	88.49	31.66	60.62	72.41	24.99	62.13	92.87
	tebuconazolemay	13.45	55.69	105.58	18.32	39.42	52.75	9.69	42.10	81.04
NEG	salicylic acid	11.73	57.12	113.49	13.32	61.27	119.89	15.24	65.72	126.20
	bisphenol A	34.33	63.78	73.62	32.51	52.70	50.46	31.29	69.00	94.28
	estrone	23.82	47.94	60.30	22.01	49.50	68.71	23.99	59.41	88.55

Table S3 The comparison between original water samples and control water samples for the storage method.

Name	Site 1 (μg L^{-1})		Site 2 (μg L^{-1})		Site 3 (μg L^{-1})	
	O1	F1	O2	F2	O3	F3
Atrazine	42.79	45.04	51.86	55.29	53.73	54.22
Caffeine	171.62	165.51	64.53	59.49	65.95	55.89
Diethyltoluamide	27.99	27.61	26.85	30.43	25.80	30.98
Ethoxyquin	55.37	56.76	69.84	78.53	74.05	79.19
Isoproturon	0.88	0.89	1.43	1.60	1.42	1.56
Metalaxyl	4.29	4.47	3.92	4.71	4.21	4.40
Metolachlor	15.27	19.12	12.56	16.59	15.93	17.89
Pirimicarb	1.30	1.43	1.77	2.02	1.93	1.95
Prometryn	9.53	9.85	8.47	8.99	8.46	8.50
Simazine	5.99	6.50	18.55	19.93	19.47	18.67
Tebuconazole	16.26	20.72	9.95	13.09	25.78	23.35
Bisphenol A	46.85	48.77	34.59	40.93	9.39	7.70
Salicylic acid	10.60	6.65	9.65	8.91	6.36	5.62
Estrone	60.39	49.35	24.09	25.78	25.84	21.70

Note: O1, O2 and O3 refers to the original water samples from Site 1-3. F1, F2 and F3 refers to the control water samples for the storage method from Site 1-3.

Table S4 Summarization of water quality

Parameters	Site 1			Site 2			Site 3		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
TOC（mg/L）	1.25	15.45	4.28	1.48	15.51	3.97	1.96	15.36	4.95
TN（mg/L）	0.91	3.84	2.45	0.93	2.55	1.80	1.08	2.49	1.84
TP（mg/L）	0.034	0.1214	0.068	0.008	0.084	0.036	0.005	0.050	0.026
PH	7.74	8.27	7.95	7.80	9.30	8.49	7.77	9.24	8.39
DO（mg/L）	6.66	10.64	8.87	7.91	13.50	10.83	7.20	12.19	10.08
Conductivity（μs/cm）	219	667	363	213	560	351	216	571	350
Turbidity（NTU）	34.9	125.0	77.2	5.8	13.7	10.2	6.8	18.7	11.8
Temperature（℃）	8.9	29.1	18.5	6.7	28.8	17.4	6.6	28.6	17.5
Si（mg/L）	1.90	5.15	3.67	1.39	4.70	2.95	1.27	5.13	3.13
Chl-α(μg/L)	1.70	24.54	5.53	4.93	46.34	20.49	4.15	48.52	20.52

Table S5 Detection results of PPCPs and pesticides in Qingcaosha Reservoir at Site 1

Unit: ng L-1	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Caffeine	8.76	10.85	61.96	89.27	57.49	8.48	12.35	22.16	46.94	27.16	47.61	79.09
DEET	21.36	4.34	8.41	13.90	12.03	3.72	4.82	3.40	5.29	5.88	5.87	4.34
Salicylic acid	1.79	<MQL	2.32	3.44	4.19	<MQL	1.93	1.81	<MQL	2.96	<MDL	<MQL
Bisphenol A	14.99	2.16	10.73	23.90	3.42	5.14	1.68	<MQL	6.87	5.14	11.29	13.06
Estrone	8.26	7.36	13.44	27.44	6.67	2.38	8.57	3.11	6.68	7.25	<MQL	<MQL
Atrazine	36.45	11.74	21.53	21.96	34.16	12.72	20.09	22.23	26.10	30.59	28.12	32.48
Simazine	39.86	8.47	8.28	3.19	4.97	1.15	7.35	2.67	7.37	16.72	4.00	7.04
Metolachlor	25.25	7.76	8.77	7.76	6.15	2.46	3.13	14.33	4.09	2.01	5.87	2.64
Prometryn	10.67	2.30	2.57	4.94	6.72	3.42	3.39	3.79	6.41	8.08	12.06	4.16
Isoproturon	3.31	<MQL	<MQL	<MQL	<MQL	<MQL	<MQL	<MQL	2.34	1.36	2.42	<MQL
Ethoxyquin	65.88	27.74	38.51	27.69	61.60	27.53	23.88	25.05	41.33	32.59	27.61	39.82
Tebuconazole	45.26	8.21	12.17	14.63	10.60	11.72	17.67	2.53	38.63	19.54	21.72	5.80
Metalaxyl	1.74	1.44	2.73	2.19	3.09	3.99	1.32	<MDL	1.21	2.18	1.05	<MQL
Pirimicarb	2.06	4.01	<MQL	<MQL	<MQL	<MQL	3.94	<MQL	16.74	11.56	24.44	12.96

Table S6 Detection results of PPCPs and pesticides in Qingcaosha Reservoir at Site 2

Unit: ng L-1	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Caffeine	12.89	14.34	15.05	37.84	36.06	9.82	12.09	12.05	32.54	12.78	21.45	28.54
DEET	8.89	7.49	6.87	13.58	8.35	7.69	3.30	2.44	3.91	2.84	3.05	3.24
Salicylic acid	4.24	<MQL	1.52	4.34	2.99	1.41	2.91	3.19	<MQL	4.10	2.56	<MQL
Bisphenol A	4.94	5.57	3.03	11.26	2.37	2.42	1.22	1.21	4.82	2.42	4.86	<MQL
Estrone	3.07	13.22	8.74	11.76	5.56	2.48	4.37	2.99	5.13	5.44	<MDL	<MDL
Atrazine	24.92	22.03	21.60	25.40	20.96	14.71	21.09	24.92	23.21	26.95	27.67	25.89
Simazine	23.33	18.22	11.85	8.84	3.23	1.03	5.68	2.42	9.06	11.43	6.44	6.20
Metolachlor	11.86	10.55	8.84	6.23	7.42	5.11	3.29	3.52	3.11	2.69	7.89	2.47
Prometryn	6.24	4.94	3.14	4.01	4.78	3.74	3.91	2.82	4.81	7.18	4.90	4.13
Isoproturon	1.59	1.59	<MQL	<MQL	<MQL	<MQL	<MQL	<MQL	1.08	1.30	1.84	<MQL
Ethoxyquin	30.58	47.39	46.79	32.79	32.80	46.93	26.05	20.28	34.32	27.57	23.24	20.34
Tebuconazole	6.59	8.52	12.07	6.63	9.73	15.22	16.82	1.24	35.30	15.24	27.12	3.90
Metalaxyl	1.03	2.02	2.69	2.05	2.65	6.02	1.59	<MQL	<MQL	1.09	<MQL	1.04
Pirimicarb	1.46	1.95	<MQL	<MQL	<MQL	<MQL	3.83	<MDL	1.78	8.31	19.89	10.77

Table S7 Detection results of PPCPs and pesticides in Qingcaosha Reservoir at Site 3

Unit: ng L-1	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Caffeine	19.96	15.41	10.24	32.80	35.21	9.25	12.55	8.17	31.75	11.82	24.58	25.38
DEET	14.18	6.46	8.03	12.83	8.20	7.76	5.43	2.58	3.65	2.90	3.56	3.04
Salicylic acid	6.48	<MQL	1.61	3.00	3.46	1.49	3.23	3.65	<MQL	4.60	1.95	<MQL
Bisphenol A	4.14	3.82	10.96	4.38	2.93	3.47	<MQL	1.03	5.11	3.47	5.24	<MQL
Estrone	7.40	13.04	12.92	15.00	10.89	2.06	5.97	2.26	6.26	5.30	<MDL	MDL
Atrazine	32.06	21.20	22.64	26.85	21.56	16.11	18.28	25.36	23.89	25.52	27.55	25.13
Simazine	30.45	17.20	13.42	10.25	3.18	1.35	5.01	3.68	9.29	10.26	6.93	6.35
Metolachlor	19.30	10.62	12.62	8.15	7.13	5.52	2.54	3.63	3.01	3.58	8.48	1.71
Prometryn	8.16	4.60	3.69	4.35	4.92	4.83	3.34	3.21	4.99	6.59	5.23	3.89
Isoproturon	3.14	1.28	<MQL	<MQL	<MQL	<MQL	<MQL	<MQL	1.46	1.57	2.18	<MQL
Ethoxyquin	48.80	42.28	44.69	36.79	32.03	37.01	24.78	21.88	35.77	28.59	17.55	19.03
Tebuconazole	11.67	7.32	12.74	7.34	9.36	13.31	15.19	3.14	35.04	18.49	32.19	4.61
Metalaxyl	1.33	1.70	2.134	2.17	2.52	4.77	2.02	<MQL	1.18	1.06	1.14	1.24
Pirimicarb	2.36	2.44	<MQL	1.02	<MQL	<MQL	3.79	MDL	2.28	8.21	21.88	7.08

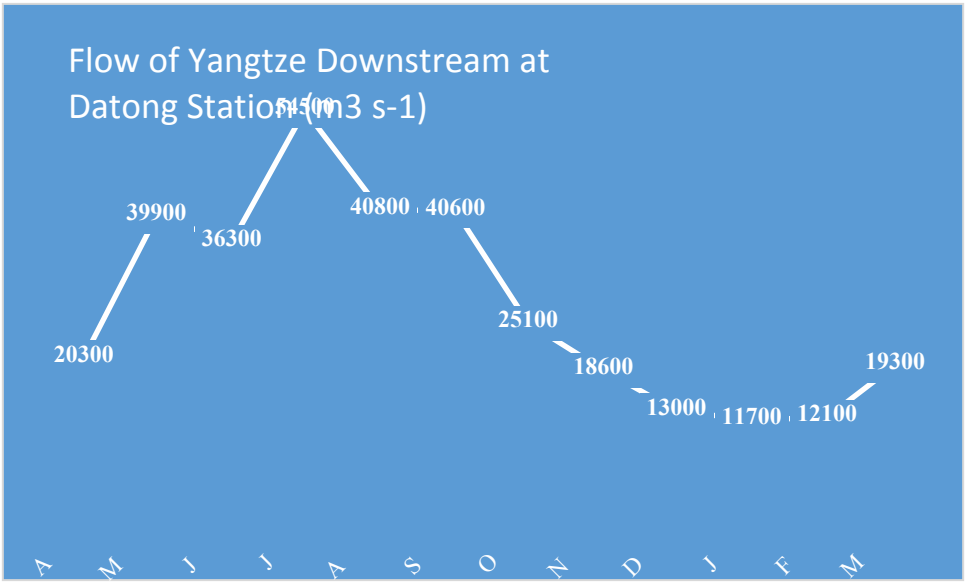

Fig S1 the Flow of Yangtze Downstream at Datong Station

Table S8 Correlations between the emerging contaminants

	Caffeine	DEET	Salicylic acid	BPA	Estrone	PPCPs_Total	Ethoxyquin	Simazine	Atrazine	Metolachlor	Tebuconazole	Prometryn	Isoproturon	Pirimicarb	Metalaxyl	Pesticides_Total
Caffeine	1			0.638*		0.926**										
DEET		1		0.597*			0.587*	0.644*		0.607*						0.720**
Salicylic acid			1		0.585*											
BPA				1	0.584*	0.822**										
Estrone					1	0.664*										
PPCPs_Total						1										
Ethoxyquin							1	0.664*	0.653*							0.620*
Simazine								1		0.722**	0.692*		0.625*			0.766**
Atrazine									1			0.646*	0.608*			0.776**
Metolachlor										1						
Tebuconazole											1	0.618*	0.861**			0.812**
Prometryn												1	0.878**			0.751**
Isoproturon													1			0.898**
Pirimicarb														1		
Metalaxyl															1	
Pesticides Total																1

* and ** indicate $p < 0.05$ and 0.01, respectively

Table S9 Pearson correlation between the conventional water quality parameters and the pesticides

r	Temperature	conductivity	TOC	DO	TN	Turbidity	Si	Chl α	TP	pH	Datong flow
Caffeine						-0.59*					
DEET						-0.63*			0.68*		
Salicylic acid											
Bisphenol A								0.71**			
Estrone	0.59*							0.84**			0.64*
PPCPs											
Atrazine							0.62*		0.59*		
Simazine									0.81*		
Metolachlor				-0.58*					0.67*		
Prometryn											
Isoproturon		0.62*									
Herbicides									0.77*		
Ethoxyquin									0.59*		
Tebuconazole											
Metalaxyl	-0.81*										0.69*
Fungicides									0.60*		
Pirimicarb	0.67*	0.73*		0.72*	0.63*						-0.65*
Pesticides									0.65*		

* and ** indicate $p < 0.05$ and 0.01, respectively.

Table S10 The relationships between the concentrations of the detected emerging contaminants and indexes related to sewage and economy.

Pearson correlation coefficient (significance < 0.05)	Contaminant			Contaminant			Contaminant		
	Name	r	N	Name	r	N	Name	r	N
Proportion of sewage up to standard from industrial area in Yangtze basin	DEET	-0.590	12	BPA	-0.698	12			
Proportion of Level Ⅴ-Ⅳ in total sewage in Anhui	SA	0.656	12	Metalaxyl	0.701	12			
Proportion of Level Ⅴ-Ⅳ in total sewage in Jiangsu	PPCPs	0.631	12	Metalaxyl	0.706	12			
Investment of wholesale and retail in Anhui	Pirimicarb	0.678	12						
Investment of water management (water conservancy, environment and public facilities management) in Anhui	BPA	-0.636	12						
Social Consumable Total Retail Sales in Anhui from Jan to Dec 2014	Atrazine	0.968	4	Pirimicarb	0.980	4			
Sewage discharge of Dairy company limited in Anhui from Jan to Dec 2014	Metalaxyl	0.962	4	Salicylic acid	0.963	4	Estrone	0.955	4
Total sewage discharge in Jiangsu from Jan to Dec 2014	Estrone	0.956	4						
Per Capita Annual Living Expenditure in rural area in Jiangsu from Jan to Dec 2014	Isoproturon	0.981	4						
Per Capita Annual Living Expenditure for food in Jiangsu from Jan to Dec 2014	Herbicides	0.971	4	Pesticides	0.985	4			
Per Capita Annual Living Expenditure for food in downtown in Jiangsu from Jan to Dec 2014	**Herbicides**	**0.997**	**4**	**Pesticides**	**0.996**	**4**	Siamzine	0.961	4
Per Capita Annual Living Expenditure for food in rural area in Jiangsu from Jan to Dec 2014	Isoproturon	0.976	4						
Per Capita Annual Living Expenditure for medical care in Jiangsu from Jan to Dec 2014	PPCPs	0.958	4	Pirimicarb	0.958	4			
Per Capita Annual Living Expenditure for medical care in downtown in Jiangsu from Jan to Dec 2014	PPCPs	0.972	4						
Production value of forestry in Shanghai from Jan to Dec 2014	**Atrazine**	**1.000**	**4**	**Prometryn**	**0.992**	**4**			
Amount of Pig on hand in Shanghai	Estrone	0.960	4						
Investment of wholesale and retail for food in Shanghai	**Pirimicarb**	0.767	12						

N=4 means seasonal data while N=12 means monthly data

Note: The concentration of each emerging contaminant and the total concentration of each group were both used. Significant Pearson's r values for $p < 0.01$ are marked in **bold** and for $p<0.05$ the rest.

Table S11 Assessment factors to derive the $PNEC_{aquatic}$

Available data	Assessment factor
At least one short-term L(E)C50 from wach of three trophic levels of the baseset (fish, Daphnia and algae)	1000
One long-term NOEC (either fish or Daphnia)	100
Two long-term NOECs from species representing two trophic levels (fish and/or Daphnia and /or algae)	50
Long-term NOECs from at least threes species (normally fish, Daphnia and algae) representing three trophic levels	10
Species sensitivity distribution (SSD) method	5 - 1 (to be fully justified case by case)

Table S12 Preliminary data base used in the derivation of PNEC for target compounds

Compounds	**LC50 (Mortality) (μg/L)**		**EC50 (Population) (μg/L)**	**EC50 (Intoxication) (μg/L)**
	Carassius auratus **(Fish)**	Cyprinus carpio **(Fish)**	Cyclotella sp. **(Alage)**	Daphnia magna (**Crustaceans**)
		PPCPs		
Caffeine	N.R.	N.R.	N.R.	440.000
DEET	N.R.	N.R.	N.R.	24000.000
Salicylic acid	N.R.	N.R.	N.R.	870000.000
BPA	113.000	N.R.	N.R.	352.500
Estrone		N.R.		
		Pesticides		
Atrazine	44374[a]	28467[a]	430[a]	50000[a]
Simazine	38000[a]	27240	800	1000[b]
Metolachlor	4900	N.R.	1790	4250
Prometryn	4000[a]	5200	N.R.	9700
Isoproturon	N.R.	N.R.	46	1000
Ethoxyquin	N.R.	N.R.	N.R.	2000
Tebuconazole	N.R.	2370	N.R.	750[b]
Metalaxyl	N.R.	100000a	N.R.	28000
Pirimicarb	N.R.	410000	N.R.	6.5

N.R. refers to no reference

[a] data derived from PAN pesticide database

[b] LC50 value of effects on mortality

Table S13 Data derived from USEPA ECOTOX for extrapolation of PNEC

Name	Taxonomic group	Test Species	Endpoint	Parameter	Conc. (μg/L)
Caffeine	Fish	Carassius auratus	Enzyme(s)	4d LOEC	3.2
	Crustaceans	Daphnia magna	Population	21d NOEC	120
	Algae	Cyanophycota	Population	56d NOEC	5
DEET	Fish	Pimephales promelas	Morphology	2d NOEC	0.6
	Crustaceans	Daphnia magna	Growth	7d NOEC	43.6
	Algae				
Salicylic acid	Fish	Leuciscus idus	Mortality	LC50	10936
	Crustaceans	Daphnia longispina	Population	21d LOEC	1000
	Algae	Pseudokirchneriella	Population	2d NOEC	1790
BPA	Fish	Pimephales promelas	Genetics	4d LOEC	0.013
	Crustaceans	Daphnia magna	Genetics	1d NOEC	0.3
	Algae	Chlorella pyrenoidosa	Population	4d LOEC	1000
Estrone	Fish	Oryzias latipes	Genetics	90d LOEC	0.005
	Crustaceans	Neomysis integer	Biochemistry	4d NOEC	0.1
	Algae				
Atrazine	Fish	Rhamdia quelen	Histology	4d NOEC	2
	Crustaceans	amphiascus tenuiremis	Reproduction	56d NOEC	3.5
	Algae	Pseudokirchneriella subcapitata	Cell(s)	4d NOEC	0.5
Simazine	Fish	Cyprinus carpio	Biochemistry	28d NOEC	0.06
	Crustaceans	Daphnia magna	No group code	21d NOEC	1000
	Algae	Pseudokirchneriella subcapitata	Population	0.014d NOEC	1
Metolachlor	Fish	Pimephales promelas	Reproduction	35d NOEC	780
	Crustaceans	Daphnia pulex	Population	16-36d NOEC	7.4
	Algae	Aureococcus anophagefferens	Population	13-16d NOEC	2
Prometryn	Fish	Pimephales promelas	Growth	32d NOEC	620
	Crustaceans	Daphnia magna	Growth	21d NOEC	1000
	Algae	Chlorella fusca var. vacuolata	Population	1d NOEC	0.82
Isoproturon	Fish				
	Crustaceans	Daphnia magna	Intoxication	48h EC50	1000
	Algae	Algae	Population	0.125d NOEC	2.5
Ethoxyquin	Fish	Oncorhynchus mykiss	Mortality	48h LC50	18000
	Crustaceans	Daphnia magna	Intoxication	96h EC50	200
	Algae				
Tebuconazole	Fish	Oncorhynchus mykiss	Growth	83d NOEC	12
	Crustaceans	Americamysis bahia	Mortality	28d NOEC	19
	Algae	Scenedesmus subspicatus	Population	4d EC50	1450
Metalaxyl	Fish	Danio rerio	Enzyme(s)	3d NOEC	70000
	Crustaceans	Daphnia magna	Reproduction	14d NOEC	100
	Algae	Pseudokirchneriella subcapitata	Population	4d NOEC	400
Pirimicarb	Fish	Pimephales promelas	Growth	36d NOEC	4400
	Crustaceans	Daphnia magna	No group code	21d NOEC	0.9
	Algae	Pseudokirchneriella subcapitata	Population	96h EC50	120000

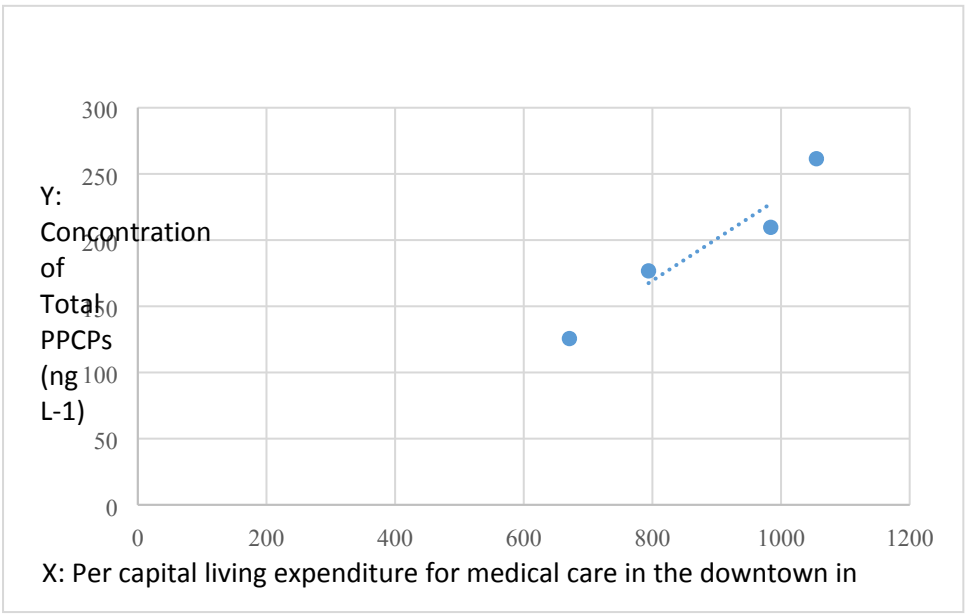

Fig S2 the linear regression for total PPCPs

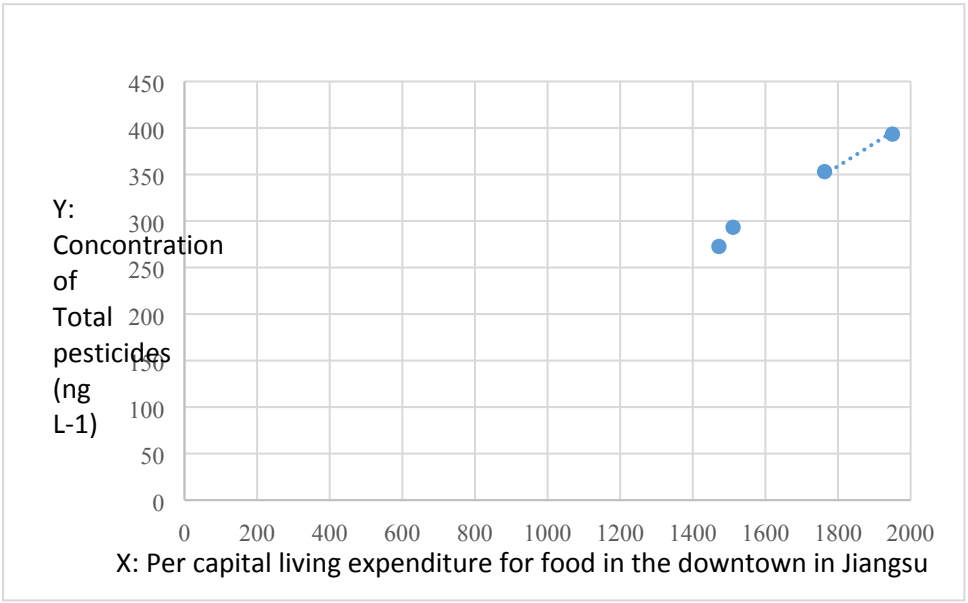

Fig S3 the linear regression for total pesticides

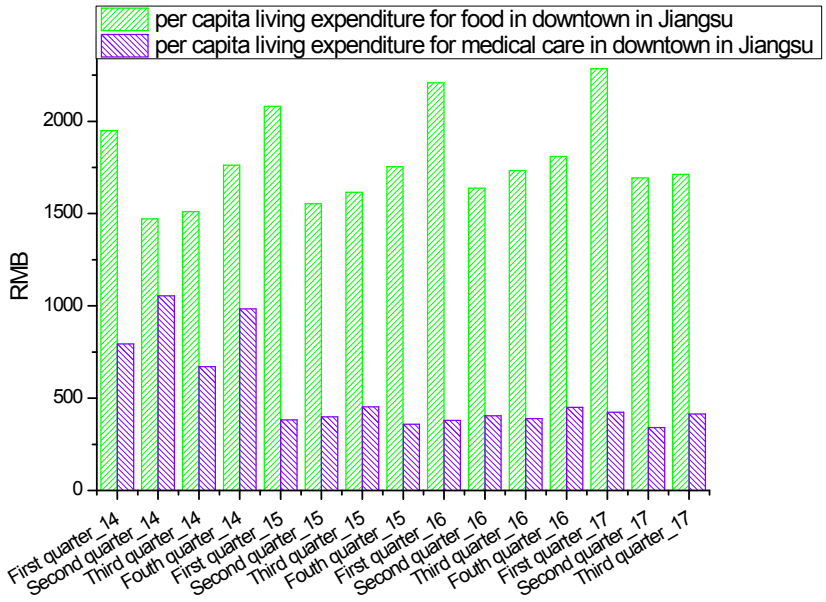

Fig. S4 Per capita living expenditure for food and medical care in downtown in Jiangsu from 2014 to 2017.