

Table S1. Basic information of participants in this project and the correspondence between participants' serum and dust food samples.

Sample	Age	Height (cm)	Weight (kg)
M1	35	155.0	49.0
M2	48	156.0	57.0
M3	34	176.0	79.8
M4	38	155.0	57.0
M5	40	152.0	53.5
M6	48	160.0	54.0
M7	41	163.0	64.5
M8	41	162.0	58.0
M9	39	159.0	52.5
M10	44	150.0	52.0
Average	40.8	158.8	55.9

Table S2. Concentration levels of OCPs in soil (ng/g) .

Category	Concentration range	Mean concentration	Median concentration	USEPA Residential Soil Reference RSL	Reference
α HCH	n.d.-0.23	0.10	0.08	57000	[1]
β HCH	0.02-0.21	0.09	0.08	57000	[1]
γ HCH	0.01-0.08	0.04	0.04	57	[1]
Δ HCH	0.02-0.16	0.07	0.05	3.8	[1]
opDDE ¹	0.01-0.33	0.13	0.06		
ppDDE	0.27-5.81	2.51	1.33	39000	[1]
opDDD ¹	0.03-1.46	0.40	0.32		
ppDDD	0.09-2.20	0.77	0.34	32000	[1]
ppDDT	0.28-17.10	2.94	0.94	37000	[1]
Methoxychlor	0.01-1.33	0.19	0.04	320000	[1]
Total	1.03-23.64	242.49	196.71		

¹ No USEPA residential soil screening level was available for this compound.

Table S3. Concentration levels of OCPs in the atmosphere (pg/m³) .

Category	Concentration range	Mean concentration	Median concentration
α HCH	n.d.-4.01	1.66	1.75
β HCH	1.56-5.13	3.17	3.19
γ HCH	0.88-4.07	2.38	2.35
Δ HCH	0.53-3.48	1.89	1.60
opDDE	0.42-1.76	0.99	1.07
ppDDE	n.d.-38.74	22.40	19.68
opDDD	n.d.-22.14	6.29	4.10
ppDDD	0.65-5.60	3.49	4.16
ppDDT	12.47-88.74	34.38	28.67
Methoxychlor	14.18-105.56	46.38	29.14
Total	40.36-258.73	123.04	95.72

Table S4. Concentration levels of OCPs in indoor dust (ng/g) .

Category	Concentration range	Mean concentration	Median concentration
α HCH	n.d.-1.23	0.26	0.25
β HCH	0.02-0.61	0.12	0.10
γ HCH	0.01-0.30	0.57	0.40
Δ HCH	0.02-1.70	0.09	0.08
opDDE	0.01-0.22	3.16	1.62
ppDDE	n.d.-13.72	0.14	0.12
opDDD	0.01-0.35	0.26	0.26

ppDDD	0.01-0.80	1.72	1.68
ppDDT	0.06-4.42	0.52	0.43
Methoxychlor	0.03-1.40	7.27	5.51
Total	0.35-21.52	14.09	10.45

Table S5. Concentration levels of OCPs in food (ng/g) .

Category	Concentration range	Mean concentration	Median concentration	FAO/WHO Codex reference value	Reference
α HCH	n.d.-0.02	0.01	0.01	10	[2]
β HCH	n.d.-0.11	0.03	0.02	10	[2]
γ HCH	n.d.-0.03	0.01	0.01	10	[2]
Δ HCH	n.d.-0.04	0.01	0.00	10	[2]
opDDE	n.d.-0.10	0.02	0.01	100	[2]
ppDDE	0.05-2.16	0.46	0.23	100	[2]
opDDD	n.d.-0.19	0.02	0.01	100	[2]
ppDDD	n.d.-0.65	0.06	0.01	100	[2]
ppDDT	0.03-2.88	0.26	0.08	100	[2]
Methoxychlor ²	n.d.-0.06	0.02	0.02	Not available	
Total	0.15-6.08	0.91	0.41		

2 No Codex maximum residue limit (MRL/EMRL) was available for methoxychlor.

Table S6. External exposure levels of OCPs in various environmental media and food (ng/kg bw/day).

	α -HCH	β -HCH	γ -HCH	Δ -HCH	opDDE	p,p'-DDE	o,p'-DDD	p,p'-DDD	p,p'-DDT	Methoxychlor
Soil	1.26E-05	1.13×10 ⁻⁵	5.04E-06	8.81E-06	1.64E-05	3.16E-04	5.04E-05	9.69E-05	3.70E-04	2.39E-05
Air	4.78E-04	9.13E-04	6.85E-04	5.44E-04	2.85E-04	6.45E-03	1.81E-03	1.00E-03	9.90E-03	1.34E-02
Dust	9.32E-02	5.97E-02	2.58E-02	1.11E-01	2.19E-02	5.66E-01	3.91E-02	7.95E-02	5.12E-01	1.26E-01
Food	0.23	0.59	0.26	0.12	0.29	8.60	0.42	1.23	4.99	0.42
Total	0.32	0.65	0.28	0.23	0.31	9.17	0.46	1.31	5.52	0.56

1. United States Environmental Protection Agency (US EPA). Regional Screening Levels (RSLs)—Generic Tables. U.S. Environmental Protection Agency. 2026. Available online: <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables> (accessed on).
2. Codex Alimentarius Commission. Codex Pesticides Residues in Food Online Database. FAO/WHO. 2023. Available online: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/> (accessed on).