

Table S1. Distribution of serum PFAS concentrations among female participants

PFAS	LOD (ng/mL)	ALL (n =84)		Control (n = 42)		PTC(n = 42)		<i>P</i>
		Detecti	P ₅₀ (P ₂₅ , P ₇₅)	Detection	P ₅₀ (P ₂₅ , P ₇₅)	Detecti	P ₅₀ (P ₂₅ , P ₇₅)	
		on rate (%)		rate (%)		on rate (%)		
9Cl-PF3ONS	0.02	92.9	0.20 (0.11, 0.34)	97.6	0.22 (0.14, 0.39)	88.1	0.19 (0.07, 0.24)	0.043
PFBS	0.02	23.8	0.02 (0.02, 0.02)	45.2	0.02 (0.02, 0.03)	2.4	0.02 (0.02, 0.02)	<0.001
PFHxS	0.10	28.6	0.07 (0.05, 0.12)	35.7	0.09 (0.05, 0.14)	21.4	0.07 (0.04, 0.09)	0.128
PFOS	0.01	100.0	1.14 (0.63, 1.79)	100.0	1.23 (0.64, 1.66)	100.0	1.01 (0.60, 1.91)	0.513
PFUnA	0.01	98.8	0.20 (0.09, 0.33)	100.0	0.23 (0.12, 0.35)	97.6	0.19 (0.07, 0.32)	0.181
PFDA	0.10	73.8	0.17 (0.09, 0.24)	73.8	0.17 (0.09, 0.25)	73.8	0.17 (0.09, 0.23)	0.598
PFBA	0.10	38.1	0.09 (0.07, 0.12)	52.4	0.11 (0.09, 0.14)	23.8	0.07 (0.06, 0.09)	<0.001
PFDoA	0.01	53.6	0.01 (0.01, 0.02)	59.5	0.01 (0.01, 0.02)	47.6	0.01 (0.01, 0.02)	0.593
PFHpA	0.01	59.5	0.01 (0.01, 0.03)	59.5	0.01 (0.01, 0.03)	59.5	0.01 (0.01, 0.02)	0.911
PFNA	0.10	70.2	0.13 (0.07, 0.20)	71.4	0.13 (0.07, 0.20)	69.0	0.13 (0.06, 0.20)	0.741
PFOA	0.05	100.0	0.87 (0.59, 1.37)	100.0	0.90 (0.64, 1.39)	100.0	0.87 (0.46, 1.24)	0.383
PFPeA	0.01	100.0	0.28 (0.17, 0.28)	100.0	0.28 (0.28, 0.28)	100.0	0.24 (0.17, 0.28)	0.022
PFTeDA	0.01	100.0	0.16 (0.16, 0.17)	100.0	0.16(0.16, 0.17)	100.0	0.16 (0.16, 0.17)	0.616
PFTTrDA	0.01	57.1	0.02 (0.01, 0.03)	66.7	0.02 (0.01, 0.03)	47.6	0.02 (0.01, 0.03)	0.172

Note: PFAS concentrations are presented as detection rates (%) and median (*P*₂₅, *P*₇₅). Values below the limit of detection (LOD) were imputed as LOD/√2. *P* values were calculated using the Mann–Whitney U test. Bold values indicate statistical significance (*P* < 0.05). PTC, papillary thyroid carcinoma; PFAS, per- and polyfluoroalkyl substances.