

Web Table 1. Geometric Mean Comparison of Benzophenone-Type UV Filter Concentration by Body Mass Index and Partner, LIFE Study, 2005-2009.

Chemical (ng/mL)	Female BMI (n=454)				Male BMI (n=439)			
	% <LOD	<24.9 Mean (95% CI)	25.0-29.9 Mean (95% CI)	≥30.0 Mean (95% CI)	% <LOD	<24.9 Mean (95% CI)	25.0-29.9 Mean (95% CI)	≥30.0 Mean (95% CI)
BP-1	<1	7.04 (5.29, 9.35) ^a	4.89 (3.30, 7.25) ^a	2.28 (1.57, 3.30) ^a	1	3.67 (2.28, 5.92) ^a	1.73 (1.25, 2.41) ^a	1.24 (0.90, 1.71) ^a
BP-2	28	0.10 (0.08, 0.12)	0.10 (0.07, 0.13)	0.09 (0.07, 0.11)	28	0.05 (0.04, 0.07)	0.05 (0.04, 0.06)	0.05 (0.04, 0.07)
BP-3	<1	13.49 (10.01, 18.16) ^a	11.00 (7.37, 16.42) ^a	5.32 (3.54, 7.99) ^a	2	6.14 (3.73, 10.11)	4.47 (3.23, 6.18)	2.96 (2.18, 4.02)
BP-8	29	0.29 (0.19, 0.44)	0.28 (0.17, 0.46)	0.16 (0.10, 0.25)	27	0.14 (0.07, 0.29)	0.12 (0.08, 0.19)	0.11 (0.07, 0.16)
4OH-BP	6	0.21 (0.18, 0.24)	0.24 (0.19, 0.31)	0.19 (0.15, 0.24)	4	0.12 (0.09, 0.16)	0.12 (0.10, 0.14)	0.14 (0.12, 0.16)

NOTE: All chemical concentrations are creatinine-adjusted.

BMI, denotes body mass index (weight in kg/ height in m²); CI, denotes confidence interval; LIFE, denotes Longitudinal Investigation of Fertility and the Environment Study; LOD, denotes limits of detection; uv, denotes ultra violet

2,4-OH-BP; 2,4-dihydroxybenzophenone or BP-1

2,2'4,4'-OH-BP; 2,2',4,4'-tetrahydroxybenzophenone or BP-2

2OH-4-MeO-BP; 2-hydroxy-4-methoxybenzophenone or BP-3

2,2'OH-4MeO-BP; 2,2'-dihydroxy-4-methoxybenzophenone or BP-8

4OH-BP; 4-hydroxybenzophenone

^a P < 0.05; Wilcoxon test, when testing each partner separately.

Web Table 2. Geometric Mean Comparison of Benzophenone-Type UV Filter Concentrations by Serum Cotinine and Partner, LIFE Study, 2005-2009.

Chemical (ng/mL)	Female Concentration (n=454)			Male Concentration (n=439)		
	None (<9.99 ng/mL)	Passive Smoking (10.0-99.9 ng/mL)	Active Smoking (≥100.0 ng/mL)	None (<9.99 ng/mL)	Passive Smoking (10.0-99.9 ng/mL)	Active Smoking (≥100.0 ng/mL)
	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)
BP-1	5.00 (4.03, 6.19) ^a	5.91 (2.53, 13.84) ^a	1.23 (0.62, 2.45) ^a	1.90 (1.50, 2.40) ^a	2.73 (0.84, 8.95) ^a	0.88 (0.54, 1.46) ^a
BP-2	0.09 (0.08, 0.10)	0.14 (0.07, 0.26)	0.13 (0.07, 0.22)	0.05 (0.04, 0.05)	0.07 (0.04, 0.14)	0.05 (0.04, 0.08)
BP-3	10.70 (8.55, 13.38) ^a	11.01 (4.49, 27.02) ^a	2.61 (1.27, 5.36) ^a	4.61 (3.66, 5.80) ^a	5.02 (1.60, 15.72) ^a	1.85 (1.15, 2.96) ^a
BP-8	0.25 (0.19, 0.34)	0.26 (0.10, 0.71)	0.12 (0.06, 0.21)	0.13 (0.10, 0.17) ^a	0.25 (0.07, 0.84) ^a	0.07 (0.04, 0.12) ^a
4OH-BP	0.21 (0.19, 0.24)	0.28 (0.17, 0.47)	0.17 (0.11, 0.26)	0.13 (0.11, 0.14)	0.22 (0.10, 0.47)	0.10 (0.07, 0.14)

NOTE: All chemical concentrations are creatinine-adjusted.

CI, denotes confidence interval; LIFE, denotes Longitudinal Investigation of Fertility and the Environment Study; LOD, denotes limits of detection; uv, denotes ultra violet
2,4-OH-BP; 2,4-dihydroxybenzophenone or BP-1

2,2'4,4'-OH-BP; 2,2',4,4'-tetrahydroxybenzophenone or BP-2

2OH-4-MeO-BP; 2-hydroxy-4-methoxybenzophenone or BP-3

2,2'OH-4MeO-BP; 2,2'-dihydroxy-4-methoxybenzophenone or BP-8

4OH-BP; 4-hydroxybenzophenone

^a P <0.05; Wilcoxon test, when testing each partner separately.

Web Table 3. Geometric Mean Comparison of Female Partners' Benzophenone-Type UV Filter Concentrations by Season, LIFE Study, 2005-2009.

UV Filter	Total (n=501) Geometric Mean (95% CI)	Winter (n = 131) Geometric Mean (95% CI)	Spring (n = 151) Geometric Mean (95% CI)	Summer (n = 110) Geometric Mean (95% CI)	Fall (n=109) Geometric Mean (95% CI)
BP1 ^a	4.62 (3.78, 5.64) [408]	2.23 (1.44, 3.45) [90]	3.55 (2.54, 4.96) [142]	12.00 (8.16, 17.63) [100]	5.07 (3.38, 7.61) [76]
BP2 ^b	0.09 (0.08, 0.11) [381]	0.08 (0.06, 0.11) [88]	0.07 (0.06, 0.09) [133]	0.15 (0.11, 0.20) [90]	0.12 (0.09, 0.16) [70]
BP3 ^a	9.81 (7.96, 12.08) [408]	4.59 (2.96, 7.12) [91]	7.06 (5.01, 9.96) [143]	27.75 (18.23, 42.22) [99]	11.68 (7.69, 17.73) [75]
BP8 ^a	0.24 (0.19, 0.31) [396]	0.16 (0.09, 0.27) [88]	0.16 (0.10, 0.25) [137]	0.58 (0.33, 1.03) [98]	0.28 (0.16, 0.48) [73]
4OH-BP ^b	0.21 (0.19, 0.24) [411]	0.17 (0.13, 0.22) [92]	0.18 (0.16, 0.22) [143]	0.28 (0.22, 0.36) [100]	0.25 (0.19, 0.32) [76]

NOTE: All chemicals are creatinine-adjusted. Valid n's are listed in brackets. CI, denotes confidence interval; LIFE, denotes Longitudinal Investigation of Fertility and the Environment Study; LOD, denotes limits of detection; uv, denotes ultra violet

2,4-OH-BP; 2,4-dihydroxybenzophenone or BP-1

2,2',4,4'-OH-BP; 2,2',4,4'-tetrahydroxybenzophenone or BP-2

2OH-4-MeO-BP; 2-hydroxy-4-methoxybenzophenone or BP-3

2,2'OH-4MeO-BP; 2,2'-dihydroxy-4-methoxybenzophenone or BP-8

4OH-BP; 4-hydroxybenzophenone

^a P <0.001; Wilcoxon test when testing each chemical separately.

^b P <0.02; Wilcoxon test when testing each chemical separately.

Web Table 4. Geographic Mean Comparison of Male Partners' Benzophenone-Type UV Filter Concentrations by Season, LIFE Study, 2005-2009.

UV Filter	Total Geometric Mean (95% CI)	Winter Geometric Mean (95% CI)	Spring Geometric Mean (95% CI)	Summer Geometric Mean (95% CI)	Fall Geometric Mean (95% CI)
BP-1 ^a	1.71 (1.38, 2.10) [394]	0.60 (0.42, 0.85) [87]	1.52 (1.07, 2.15) [134]	4.98 (3.29, 7.54) [99]	1.72 (1.06, 2.79) [74]
BP-2 ^b	0.05 (0.04, 0.06) [379]	0.05 (0.04, 0.07) [86]	0.04 (0.03, 0.05) [130]	0.07 (0.05, 0.09) [95]	0.04 (0.03, 0.06) [68]
BP-3 ^a	3.97 (3.24, 4.87) [387]	1.55 (1.09, 2.21) [86]	3.52 (2.52, 4.91) [132]	10.53 (6.77, 16.37) [96]	4.14 (2.65, 6.47) [73]
BP-8 ^b	0.12 (0.09, 0.15) [378]	0.07 (0.04, 0.12) [85]	0.11 (0.07, 0.17) [128]	0.26 (0.14, 0.47) [96]	0.09 (0.06, 0.15) [69]
4OH-BP ^a	0.13 (0.11, 0.14) [396]	0.10 (0.08, 0.12) [88]	0.11 (0.09, 0.13) [134]	0.20 (0.16, 0.26) [99]	0.12 (0.09, 0.14) [75]

NOTE: All chemicals are creatinine-adjusted. Valid n's are listed in brackets.

CI, denotes confidence interval; LIFE, denotes Longitudinal Investigation of Fertility and the Environment Study; LOD, denotes limits of detection; uv, denotes ultra violet

2,4-OH-BP; 2,4-dihydroxybenzophenone or BP-1

2,2'4,4'-OH-BP; 2,2',4,4'-tetrahydroxybenzophenone or BP-2

2OH-4-MeO-BP; 2-hydroxy-4-methoxybenzophenone or BP-3

2,2'OH-4MeO-BP; 2,2'-dihydroxy-4-methoxybenzophenone or BP-8

4OH-BP; 4-hydroxybenzophenone

^aP <0.0001; Wilcoxon test when testing each chemical separately.

^bP <0.01; Wilcoxon test when testing each chemical separately.

Web Table 5. Correlation Matrix for Partners' Urinary Benzophenone Concentrations, LIFE Study, 2005-2009.

		Females				
		BP-1	BP-2	BP-3	BP-8	4OH-BP
Males	BP-1	0.08	-0.02	0.04	0.06	0.00
	BP-2	0.00	-0.02	0.03	-0.03	-0.01
	BP-3	0.05	-0.01	0.03	0.03	0.00
	BP-8	0.03	-0.02	0.00	0.08	0.00
	4OH-BP	0.10	0.03	0.04	0.10 ^a	0.19 ^a

LIFE, denotes Longitudinal Investigation of Fertility and the Environment Study

2,4-OH-BP; 2,4-dihydroxybenzophenone or BP-1

2,2'4,4'-OH-BP; 2,2',4,4'-tetrahydroxybenzophenone or BP-2

2OH-4-MeO-BP; 2-hydroxy-4-methoxybenzophenone or BP-3

2,2'OH-4MeO-BP; 2,2'-dihydroxy-4-methoxybenzophenone or BP-8

4OH-BP; 4-hydroxybenzophenone

^a P < 0.05; T-test based on the Pearson correlation coefficient.